1989

Teacher perceptions of and satisfaction with the power base uses of elementary and secondary principals

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TEACHER PERCEPTIONS OF AND SATISFACTION WITH THE POWER BASE USES OF ELEMENTARY AND SECONDARY PRINCIPALS

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A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota

December
1989

This dissertation submitted by John P. Franzoia in partial fulfillment of the requirements for the degree of Doctor of Philosophy from the University of North Dakota has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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Title Teacher Perceptions of and Satisfaction with the Power Base Uses of Elementary and Secondary Principals

Department Educational Administration, Center for Teaching and Learning

Degree Doctor of Philosophy

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Signature John D. François

Date December 1, 1989

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ACKNOWLEDGMENTS

I would like to express my deep gratitude to Dr. Donald Piper for extending himself for me far beyond what was required. I appreciate his patience, perseverance, selflessness and, most of all, his considerable attention to me as a person.

Thank you to my committee members, Drs. Richard Hill, Richard Landry, Robert Kweit, and Thomas Howard, for their assistance and attentiveness after all this time.

Next, thank you to Don Wilke, Superintendent of Royalton School District, for his prodding, encouragement, support, and friendship over these years and for generously allowing me the time to complete this work.

I also thank my parents, Joseph and Dorothy, for giving me the love and educational opportunities that have brought me to this point.

Thank you to Pat Papineau for her marathon typing sessions, for getting me to deadlines with such polished work, and for handling all the details. Her sacrifice of family time is very much appreciated.

A very special thank you to Diane Schneider for her invaluable efforts. I am grateful beyond words for her repeated long hours at the computer after a frantic day's work, her incessant good humor, and her unfailing support.

Finally, thank you to my wife, Karmel, who put this entire process into perspective. Her considerable editorial skills, brainstorming, unfailing moral support, tolerance of my single-mindedness and moods, and love have made this work more than a dissertation.

ABSTRACT

The purpose of this study was (1) to determine how elementary and secondary teachers in a large North Dakota school district perceived the power base use of their principals and (2) to determine how satisfied these teachers were with the power base use.

The researcher administered the Power Perception Profile-Perception of Other and a brief questionnaire to the teachers to study the relationship between satisfaction and background variables. Of 544 teachers in the district, 410 participated resulting in 379 usable responses, a total of 69.7% of all teachers in the district. Interviews were conducted with principals after results were analyzed.

Teachers were asked to respond to all items of the instrument two times, once in terms of the principal's actual and once in terms of the principal's ideal power base use. Differences between the actual and ideal scores were calculated and totaled to create a total difference (d-score) which was used as a measure of teacher satisfaction with the perceived use of principal power base use.

The data were analyzed by school level using analysis of variance, Pearson product moment correlations, t-tests, and descriptive analysis of power base rankings.

Rankings of the power bases most used by principals were generally in accord with the findings from other studies in business, industry, and higher education as well as from studies in K-12 educa-

tional settings. Expert, legitimate, and referent power bases were perceived as most used by principals and connection and coercive power bases as least used. Responses to individual power bases also were similar to previous findings. Teacher satisfaction was positively associated with principal uses of expert and reference power bases and negatively associated with coercive, connection, legitimate, and reward power bases. Analysis of the range of d-scores and their frequency distribution reflected general satisfaction with principal power base use.

Teacher communication with the principal and perceived teacher influence on school operations were positively associated with teacher satisfaction at both elementary and secondary levels. Principal differential use of power based on teacher gender, age, and teaching experience was negatively associated with satisfaction.

CHAPTER I

INTRODUCTION

Effective schools research has emphasized the central role of the principal in educational improvement (Brookover et al. 1979, Rutter et al. 1979, Edmonds 1982, Sweeney 1982). The effective principal is someone who has a vision of excellence, articulates it, and translates it into goals; that person establishes a climate supportive of the goals, monitors progress toward those goals, and intervenes to support or correct them when necessary (Rutherford 1985). The emphasis on the role of the principal as an instructional leader has been particularly acute (Benjamin 1981, Bossert et al. 1982, Edmonds 1982, Persell and Cookson 1982, McCurdy 1983, Keefe 1987, Minnesota Department of Education 1989).

As leaders in the relatively flat hierarchical structure of the school, principals have an extremely important and influential position. Their immediate supervisory role over teachers; direct input into the curriculum, assignments and schedule; and personal interactions with students, staff, parents, and community do much to determine the tone and quality of the school. In discussing the relationship between principal leadership and student achievement, Andrews was quoted in an interview with Brandt (1987) as saying, "We have some schools that are good even though they don't have a principal

who is a strong instructional leader; however, we do not have any which attained excellence" (p. 13).

Principals often have been viewed as autocratic, dominating figures in the power structure of the school. However, in the 1960s and 1970s collective bargaining, judicial decisions favoring student rights, centralization, community activism, and legislative intervention at the state and federal levels have constrained their power and affected their operating styles (McCleary 1971, Redfern 1979, Crowson and Porter-Gehrie 1981, Johnson 1981, Kraig 1981, McAndrew 1981, Mitchell et al. 1981). The current emphasis in theory and research on the instructional leadership role of the principal appears to be strengthening the principal's position again. Ironically, just as principals are being exhorted in the literature to be instructional leaders, facilitators and motivators rather than mere managers, they are being asked to delegate and share their power with teachers and, sometimes, parents and community members, to enhance the power of all (Guthrie 1986, Frymier 1987, Barth 1988, Maeroff 1988, Rallis 1988, Lane and Walberg 1989, Lieberman 1988). Some suggest that managerial demands have preempted the instructional leadership role (Howell 1981, Morris et al. 1982) and that the principal would be more satisfied (McAndrew 1981) and effective as a good manager (Rallis and Highsmith 1986). The principal as chief executive officer (Guthrie 1986), symbolic leader (Deal and Celotti 1980), and symphony conductor (Maeroff 1988) reflects this role. These cross currents--being a strong leader yet willing to delegate and empower others; being a leader or a manager--while not necessarily antithetical, put strong

pressures on principals and have major implications for how they will interpret their roles and use their influence.

Although control of the schools--whether through site based management, teacher empowerment, or principal leadership--is a central issue in the school restructuring debate (Rutherford 1985, Maeroff 1988), the negative connotation that the word "power" carries in education often circumscribes attempts to address the issue directly. Power connotes the domination of and consequent subservience of staff to the principal, maintenance of the status quo, order, discipline, strict hierarchy, centralization, and management from above--a "Theory X" approach to management. Stimson and Appelbaum (1988) addressed this situation when they stated,

> Educators are expected to shun the overt use of power in favor of reasoned discourse and other polite (and, presumably more rational) techniques. The use of power is more readily acknowledged in the corporate board room or in the halls of Congress than in the classroom or the principal's office (p. 313).

Despite this historical attitude towards power, the present emphasis on collegiality and shared power between teachers and administrators seems widely accepted. Only in Chicago, where principals have been deprived of tenure in a radical restructuring of the schools, has the debate over power been acrimonious.

Several writers have tried to soften the resistance to the necessity of power in individuals and organizations to make things happen by reconciling its negative and positive aspects (McClelland 1970, Crozier 1973, Winter 1973, Zaleznik and Kets de Vries 1975). Sergiovanni (1987) suggested that it is not power <u>per se</u> but rather its use that makes it positive or negative.

Relatively recent research on school organization has offered a new way of looking at school structure. Traditionally schools have been viewed as tight bureaucratic structures. However, Deal and Celotti (1980), Firestone and Herriott (1982), and Weick (1982) suggested that schools are loosely coupled structures. Recognition that elements of one or the other--or more likely both--are operating has implications for principal power usage. Bureaucracies tend to use legitimate power with its heavy reliance on role to accomplish their tasks, whereas loosely coupled structures tend to rely more on referent power with a heavier emphasis on the person. Principal power base use, therefore, will influence and be influenced by the structure in which one works. Being conscious of one's power bases and the flexibility one has in using them potentially makes the leadership role easier and more fulfilling by enabling one to adjust to or adjust a situation rather than being confined by it.

Though the literature is replete with articles on leadership, there is little examination of its relationship to power except in the area of politics. Likewise, literature on power has tended to ignore its relationship to leadership, focusing instead on its usefulness as a concept to interpret or measure political, sociological, philosophical and psychological phenomenon.

Several leadership theorists, however, have recognized that power is a critical ingredient of leadership. "Leadership is the exercise of power" (Zaleznik and Kets de Vries 1975, p. 3). Janda (1960) viewed leadership as a power phenomenon. Fiedler (1967) and Hersey and Blanchard (1982) both incorporated the concept of power into

their leadership models. Stogdill (1981) and Burns (1978) viewed power and leadership as aspects of each other. Sergiovanni (1987) viewed power use as a means of distinguishing successful from unsuccessful leaders.

Since power is a component of leadership, effective use of power requires principals to understand their power bases. Several constructs are available for understanding these bases. Weber (1947) posited traditional, legal-rational, and charismatic forms of power. Guba (1960) distinguished between role and person-based authority. Peabody (1962) differentiated between formal (positional) and functional (personal) power. Etzioni (1961) identified coercive, utilitarian, and normative power. French and Raven (1959) developed the concept of five types of power bases: reward, coercive, legitimate, referent, and expert power. This typology was modified by Raven and Kruglanski (1975) to include information power and by Hersey, Blanchard, and Natemeyer (1979) to include connection power.

The French and Raven model--both as developed initially and as expanded--has been used extensively in schools as well as in business, industry, and higher education to research power use and satisfaction. Because it has an established research history and would apply to the types of power principals have at their disposal, it was selected as the means of analysis for this study. It is a sensible and meaningful though not exclusive approach to power usage in schools. It is conceptually strong enough to explain principal behaviors while flexible enough to serve as a departure point for more precise analysis.

In summary, although power is a concept seldom addressed directly in education because of its generally negative connotation, it is, nonetheless, a major force underlying what does or does not occur in schools. Understanding the means and uses of power bases provides a meaningful way to look at principal-teacher relationships in schools in the interest of bettering those relationships and improving student achievement.

Purpose

The purpose of this investigation was twofold: (1) to determine how elementary and secondary school teachers in a large North Dakota school district perceived the power base use of their principals, and (2) to determine how satisfied these teachers were with the power base use. Teacher perceptions of principal power base use were measured by comparing actual with ideal responses on Hersey and Natemeyer's Power Perception Profile-Perception of Other. In addition, teacher satisfaction with principal power base use was analyzed on the basis of selected background variables.

Two general research questions and 10 more specific questions were developed to analyze the findings.

1. How do teachers perceive the power base use of their principals?

2. How satisfied are teachers with perceived power base use of their principals?

   a. Is there a relationship between teacher gender and teacher satisfaction with perceived power base use of principals?

b. Is there a relationship between teacher marital status and teacher satisfaction with perceived power base use of principals?

c. Is there a relationship between teacher age and teacher satisfaction with perceived power base use of principals?

d. Is there a relationship between school level and teacher satisfaction with perceived power base use of principals?

e. Is there a relationship between total years of teaching experience and teacher satisfaction with perceived power base use of principals?

f. Is there a relationship between years of teaching experience under the current principal and teacher satisfaction with perceived power base use of principals?

g. Is there a relationship between teachers whose principals already were in their current positions when the teachers assumed their current teaching positions and teacher satisfaction with perceived power base use of principals?

h. Is there a relationship between the degree to which teachers think their principals attempt to use influence differently on the basis of teacher gender, age, and teaching experience and teacher satisfaction with perceived power base use of principals?

i. Is there a relationship between perceived teacher influence on school operations and teacher satisfaction with perceived power base use of principals?

j. Is there a relationship between teacher satisfaction with communication with the principal and teacher satisfaction with perceived power base use of principals?

Significance

This study should be helpful to both researchers and practitioners in several ways.

1. It expands the literature on principal power base use and employee satisfaction with it.

2. It contributes to the literature which examines whether or not power base use still is a valid and useful way of studying principal behavior.

3. It provides a relatively homogeneous population of teachers and principals which makes interpretation of findings easier than if there were numerous intervening variables. For example, all teachers worked under the same collective bargaining agreement so differences in responses due to different contract provisions were not an interfering variable. All principals were white males which also makes for more uniform interpretation. Furthermore, the study presents data which compare elementary and secondary principals in a single district under a single superintendent.

4. It could provide a basis for principal training and staff development by making principals aware of the strengths and weaknesses inherent in the application of each power base and of the importance of power use as a component of leadership. It provides a means for generating dialogue and improved communication among staff members in regard to a principal's management style.

5. It may provide a means of predicting the way principals will respond to increased teacher demands for shared decision making.

Limitations

The study does have several limitations.

1. The Power Perception Profile (PPP) was designed for training and feedback rather than research. Since power base usage is often situational, the data reported may reflect a particular moment in principal-teacher relations rather than a permanent state.

2. Studies using the five power base model showed that there may be some interdependence among the power bases (Warren 1968); this also may be true of the seven power bases that the PPP measures. The single research study done on the validity and reliability of the instrument reported a moderate overall estimate of validity and low reliability (Delaney 1980).

3. The items of the PPP are ipsative--that is, the strength of each power base is expressed not in absolute terms but in relation to other bases which are assessed. Face validity rather than a normative score is the basis of item validity. It must be assumed that the instrument measures what it says it does.

4. Since no definitions were given for the power bases when teachers completed the instrument, teachers may have interpreted the power bases differently; for example, expertise could be considered in terms of instruction or handling discipline or budgets or none, some, or all of the above.

5. The power base typology used in the PPP may not be all-inclusive of the types of power a principal has or uses. Other examinations of power have used different constructs (Weber 1947, Etzioni 1961, Muth 1973).

6. Teachers may not know if a principal has or uses all seven power bases, but the forced-choice format of the instrument assumes the existence of all seven and requires a respondent to address each of them.

7. A legal dispute at one school could have affected the results at that one school, skewing them in the direction of legitimate and coercive power, and may have had negative carryover to other schools as well.

8. Results may not be comparable to those which would be found in a more heterogeneous population and setting. For example, if teacher race, principal gender, school organization, or school location had been more varied, results might have been different.

The following chapter presents a review of the literature related to this study. It focuses upon the concept of power and on applied research using a power base typology.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter presents a review of the literature related to teachers' perceptions of the power base use of principals. It is divided into six main parts: the concept of power; psychological aspects of power; power bases and influence means; a power base model; research using a power base typology applied to business, industry, and higher education; and research using a power base typology applied to teachers and principals in elementary and secondary school settings.

The Concept of Power

Power is recognized by many theorists as a fundamental concept in understanding social interaction (Bierstedt 1950, Lasswell and Kaplan 1950, May 1972, Crozier 1973, Kipnis 1976, Hall 1977). It is, however, equally regarded as conceptually problematic. Bierstedt (1950) said that "of sociological concepts none is more troublesome than the concept of power" (p. 730). Dahl (1957) said that power was "probably not a Thing at all but many Things" (p. 201) and that we were more likely to develop a variety of limited scope theories about power than "a single, consistent, coherent Theory of Power" (p. 202). Power is viewed as vague and ambiguous (Crozier 1973), troublesome and enigmatic (Nyberg 1981), vague and high-charged (Van Doorn 1963), and a primitive concept (Bacharach and Lawler 1980). Dahl (1957) and

Cartwright (1965) acknowledged the difficulty in studying power but rejected the idea that doing so was like working in a bottomless swamp.

> The view taken in this chapter is that the study of influence is not a bottomless swamp, although the terrain does have its soggy spots. The basic problem is how to keep from getting lost among masses of discrete data and interminable theoretical distinctions, especially since the natives appear to have no common language. A map is needed to help the student find his way (Cartwright 1965, p. 4).

Part of the difficulty arises from the multiplicity of definitions of power. Dahl (1957) recognized the underlying problem when he stated, "to define the concept 'power' in a way that seems to catch the central intuitively understood meaning of the word must inevitably result in a formal definition that is not easy to apply in concrete research problems" (p. 202). This difficulty is more easily understood if one examines the elements, stated and implied, that comprise definitions of power. Common components are an agent, a target, resources, a relationship, reciprocity (symmetry/asymmetry), intent, potential, and effect. What differs among definitions is the emphasis that different theorists have placed on these component parts. Kipnis (1976) studied power use from the perspective of the powerholder, while Bierstedt (1950), Dahl (1957), French and Raven (1959), and most other researchers have examined the target's response to power acts. Regardless of their perspective, all writers have recognized that power consists of a relationship between agent and target (Dahl 1957, Emerson 1962, Bachrach and Baratz 1963, Cartwright 1965, Benn 1967, Wrong 1968, Crozier 1973, Hall 1977). Power is based on the dependency of parties on each other (French and Raven 1959, Thibaut and Kelley 1959, Emerson 1962, Mechanic 1962, Blau 1964, Kipnis 1976). The resources that one

possesses determine the outcomes of interactions between parties by providing the means to influence the behavior of another (Dahl 1957, Cartwright 1965, Kipnis 1976). Power may be asymmetrical in that the power wielder exerts greater control over the behavior of the power subject than the reverse (Blau 1964, Simon 1969, Wrong 1979). Power may be causal in that the power act has an intended effect on another (Hobbes 1955, Dahl 1957, Cartwright 1965, and Wrong 1979). Power may be reciprocal; both parties in a power relationship have an influence on each other (Bierstedt 1950, Benn 1967, Nagel 1968, Simon 1969, Crozier 1973). Power may involve equity, cost, exchange, or negotiation between parties (Emerson 1962, Blau 1964, Michener and Suchner 1972, Crozier 1973, Henderson 1981).

Cobb (1984), Hall (1977), Lasswell and Kaplan (1950), and Russell (1938) focused on the exercise of power while Wrong (1979), Bierstedt (1950), Crozier (1973), Benn (1967), Nagel (1968), Janda (1960), and Etzioni (1961) focused on the capacity or potential to exert power. Winter (1973) and May (1972) recognized power as both an actual act and a potential act.

In the debate whether intended or unintended effects should be counted as power acts, Russell (1938), Wrong (1979), Benn (1967), Winter (1973), Cobb (1984) and Tannenbaum (1968) emphasized that intended acts are power acts. Simon (1969), Friedrich (1950), French and Raven (1959), and Nagel (1968) acknowledged that behavior changes in a target due to an anticipated action by a power wielder are also power acts. Pollard and Mitchell (1972) included both actual and potential power in their concept of power, distinguishing between "A's

power as stemming from an act or influence attempt and A's power as stemming from the effects of anticipated reactions" (p. 443). Crozier (1973) also recognized that power can be an intentional relationship or an involuntary influence. Cartwright (1965) viewed intent as having ambiguous status, and Hall (1977) stated that an unintended act to which a target responded was a target act. Disputes exist also over whether more attention should be paid to the outcomes (Dahl 1957, French and Raven 1959, Mechanic 1962, Pollard and Mitchell 1972, Winter 1973, Wrong 1979) or to the process of power acts (Crozier 1973, Lasswell and Kaplan 1950). Thus, what we have according to Kipnis (1976) is "no one theory of power usage but a multitude of overlapping descriptions" (p. 15).

Cartwright (1965) attempted to simplify this complexity by identifying three major aspects of the influence process: "(a) the agent exerting influence, . . . (b) the method of exerting influence, and (c) the agent subjected to influence." Developing these aspects into a definition, he stated, "When an agent, O, performs an act resulting in some change in another agent, P, we say that O influences P. If O has the capability of influencing P, we say that O has power over P" (p. 4). French and Raven (1959) similarly viewed power as potential influence within a situational context as did Hersey, Blanchard, and Natemeyer (1979) when they connected power to leadership, defining power as "the leader's influence potential" (p. 418).

The preceding three definitions reflect Dahl's intuitively understood definition that "A has power over B to the extent that he can get B to do something that B would not otherwise do" (p. 202) and

represent the framework--influencer, resources, influencee--of this study.

Different frameworks have been constructed for viewing power relationships. Field theory, proposed by Lewin (1951) and operationalized in regard to power by Cartwright (1959) and French and Raven (1959), presented power relations as the force and resistance put towards each other by opposing forces. Exchange theory provided an analysis of power relations based on economic theory in which the outcome of the power relationship is determined by the costs and rewards that each party can impose on the other (Thibaut and Kelley 1959, Emerson 1962, Blau 1964, Michener and Suchner 1972, Bacharach and Lawler 1976). Decision theory involved making decisions that will most assure the outcomes desired by an individual (Pollard and Mitchell 1972; Tedeschi, Bonoma, and Schlenker 1972).

Analyzing power requires confronting the problem of key terms used interchangeably with power such as influence, control, authority, persuasion, compulsion, and force. Because of the potential confusion caused by this usage, Benn (1967) suggested considering the terms as "instances of different members of a family of concepts" (p. 424). Dahl (1968), addressing the same problem, suggested combining all the terms under the collective label of "power terms" (p. 407).

Winter (1973) pointed out that "from one writer to the next, different words are often used for the same concept, and the same word is used for different concepts" (p. 5). For Nagel (1975) one person's power is another's authority. Wrong (1979), on the other hand, viewed force, manipulation, persuasion, and authority as distinct forms of

power. Bachrach and Baratz (1963) rejected authority as a form of power while Bierstedt (1950) viewed power as institutionalized in authority. Benn (1967) stated that "the meanings of 'power,' 'influence,' 'control,' and 'domination' are uncertain, shifting and overlapping" (p. 424). Rogers (1974) stated that the terms "power, influence, control, and other related terms seem to be definitionally indistinct among scholars" (p. 1419). Mechanic (1962), Tannenbaum (1968), Rogers (1974), and Mowday (1978) admitted to using power synonymously with the terms "influence" and "control." An excellent example of the intertwining of power terms emerges from Bierstedt (1950) who--after distinguishing power from prestige, influence, dominance, and rights--asserted that "power is not force and power is not authority, but it is intimately related to both and may be defined in terms of them. . . . (1) power is latent force; (2) force is manifest power; and (3) authority is institutionalized power." He admitted that the definitions were circular and concluded by saying that "power is thus neither force nor authority but, in a sense, their synthesis" (p. 733).

Another issue that is debated regarding power is whether it is a fixed (zero sum) or a variable sum. Fixed sum theorists believe that there is a limited amount of power available which can be gained or lost (Lee 1977). Variable sum theorists believe that the total amount of power in a system may grow, and leaders and followers may jointly enhance their power (Lammers 1967, Tannenbaum 1968, McMahon 1976). Bacharach and Lawler (1980) partitioned these ideas, viewing influence as non-zero sum and authority as zero sum, but concluded by stating

that these were extreme positions and that a mixed motive was more accurate: "Parties are simultaneously confronted with incentives to cooperate and incentives to compete" (p. 107). Hall (1977) accepted the premise that power is a variable sum but cautioned that power amounts usually change gradually and that at any one point in time the amount of power is fixed.

Psychological Aspects of the Concept of Power

Attempts to analyze power relations can be hampered by the negative connotations the word carries.

> Power is an ugly word. It connotes dominance and submission, control and acquiescence, one man's will at the expense of another man's self-esteem. The word also evokes images of a human disorder, in which pride and ambition disturb perception. Power can obscure vision, distorting it by manipulation and intrigue (Zaleznik and Kets de Vries 1975, p. 3).

Crozier (1973) stated that people often view power as morally taboo. Winter (1973) described the Western tradition which argues that man's lust for power is a demonic flaw which will corrupt and destroy him. Nyberg (1981) stated that we want "power as individual achievement and fear it as organizational control" (p. 31). McClelland (1970) asserted that in American society individuals are proud of having a high need to achieve but dislike being told they have a high need for power. Furthermore, anyone who uses influence to help others can be accused of manipulation. Taking a different perspective, May (1972) and Nyberg (1981) asserted that powerlessness could be just as corrupting as power because the powerless are likely to use the same abusive behaviors to gain power that the powerful use to maintain or expand power. Stimson and Appelbaum (1988) stated that the concept of power seemed "strangely

foreign to education" and that "educators are expected to shun the overt use of power in favor of reasoned discourse and other polite (and presumably more rational) techniques" (p. 313).

But the negative view of power is one-sided. McClelland (1970) asserted that power had a positive as well as a negative face. The latter was characterized by the dominance-submission mode and by a tendency to treat other people as pawns rather than as origins. The former was characterized by a concern for group goals, for empowering group members, and for making them feel like origins rather than pawns. Zaleznik and Kets de Vries (1975) described it as "the basis for the direction of organizations and for the attainment of social goals" (p. 3). Crozier (1973) noted that there were

> . . . two contradictory aspects of power that are indissolubly linked together. On the one hand, the power relationship appears as something inadmissible and shameful--quite simply, as blackmail. On the other hand, power is honored as the legitimate, necessary, and respectable expression of the social control that is vital to the success of any collective effort (p. 221).

A preoccupation with power has led some to assume a power motive. Hobbes (1955) stated that all mankind had "a perpetual and restless desire of power after power, that ceaseth only in death" (p. 64). Nietzsche (1967) viewed the will to power as the basic psychological drive: "All driving force is will to power, that there is no other physical, dynamic or psychic force except this" (p. 366). For him it was the "innermost essence of being" (p. 369). Adler (1966) viewed the motive as an attempt to overcome feelings of insecurity and weakness. Russell (1938) also recognized a desire for power as an

essential part of human nature but distinguished between power as a means and as an end in itself.

For Minton (1972), a power motive "refers to the extent to which one is motivated to seek specific goals of personal power thereby satisfying the need for self-determination" (p. 107). He recognized power as a personality construct that was a product of both one's immediate environmental structure and one's past experiences in attempts to carry out intended effects. He saw a universal power drive in all humans and a power motive reflecting variations across individuals regarding the extent to which a person was motivated to achieve specific goals. Sullivan (1953) also distinguished between a general power motive to use one's ability to achieve and a learned power drive to compensate for the frustrations one encounters when one discovers the powerlessness to achieve desired ends with the abilities at one's disposal.

McClelland (1975) asserted that the goal of the power motive is to feel powerful and presented a four stage model of power corresponding to Freud and Erickson's stages of ego development. Winter (1973) recognized a power motive as a key personal variable for understanding power behavior. He defined it as "a disposition to strive for certain kinds of goals, or to be affected by certain kinds of incentives" (p. 17). The status of having power was the goal of the motive. Kipnis (1976) viewed power motives as something that could be aroused "when an individual experiences an aroused need state that can only be satisfied by inducing appropriate behaviors in others" (p. 16). These power

motives could be aroused by an irrational impulse, by an institutional role, and by a desire to obtain reward for oneself.

Zaleznik and Kets de Vries (1975) rejected the theory of an autonomous power motive as inadequate to understanding the psychology of power, stating that power is a course of behavior rather than a motive. They argued that the concept of an autonomous motive is too narrow for investigating the motivation of leaders. They did, however, recognize an orientation toward power as part of personality development.

Cartwright (1965) also rejected a universal motive for power, proposing instead instrumental and intrinsic motivation for exerting influence. Agents as persons are motivated by the hope of gratification either from the act of influence or by the ends obtained by the act. Agents in roles are more motivated by the expectations others have for the role occupant. Wrong (1979) rejected as tautological Hobbes and Russell's view of power as a basic drive suggesting instead that if an elemental lust for power exists, it must derive from a propensity to aggression.

The Concepts of Power Bases and Means of Influence

As indicated earlier, Cartwright (1965) identified three major aspects of the influence process: the agent exerting influence, the method of exerting influence, and the agent subjected to influence. He asserted that the ability of an agent to exert influence arises from the possession or control of valued resources. For Dahl (1957), these resources represented the base of an actor's power, consisting of "all the resources--opportunities, acts, objects, etc.--that he can exploit

in order to effect the behavior of another" (p. 203). He considered the power base to be inert. It had to be exploited in some way to alter the behavior of others; means or instruments became the mediating activity by which this was done. Similarly, Kipnis (1976) saw resources as "the powerholder's potential for successful influence" (p. 21). Van Doorn (1963) considered the power base as "the primary condition for the exercise of power" (p. 14). For French and Raven (1959), the basis of power meant "the relationship between O [social agent] and P [person] which is the basis of that power" (p. 612).

Because terms such as power base, means of influence, types of influence, resources, types of power, and sources of power often are used interchangeably or overlap, it is difficult to draw a sharp line between power bases and the use of them to influence outcomes. Van Doorn (1963) argued that distinctions between the forms or types of power are little more than arbitrary.

Dahl (1957) recognized any resource that an actor could exploit to affect the behavior of others as a power base. Kipnis (1976) distinguished between personal resources that are part of a person's makeup and institutional resources that are derived from participation in institutional life. Rogers (1974) distinguished between two distinct kinds of resources.

> Instrumental resources are the means of influence; they can be used to reward, punish, or persuade. Infra-resources are those attributes, circumstances, or possessions that must be present before the appropriate instrumental resources can be activated or invoked; in that situation they are the preconditions or prerequisites without which instrumental resources are useless (p. 1425).

So, though both are considered bases of power, one resource clearly is a precondition for the other. However, depending on the situation, most resources can be either instrumental or infra-resources (p. 1426).

Rubin and Berlew (1984) recognized personal and positional power in organizations. They emphasized four sources of personal power as key to managing an organization in different times: persuading, asserting, bridging, and attracting. Modifying Weber (1947), Mitchell and Spady (1983) identified four power resources: moral approbation, psychological domination, technical limitations, and contractual coercion. May (1972) presented five kinds of power: exploitative, manipulative, competitive, nutrient, and integrative. Lasswell and Kaplan (1950) combined eight means of influence--power, respect, rectitude, affection, well-being, wealth, skill, and enlightenment--with eight goals of influence to generate sixty-four forms of the influence process. Russell (1938) described three forms of power used to influence individuals: physical power, rewards and punishments, and influence on opinion. Since power is a dependency relationship, Mechanic (1962) stated that within organizations one makes others dependent upon him by controlling access to information, persons, and instrumentalities. Lee (1977) proposed a power system inventory model which combined leader power sources, worker power sources, work design power, and extraneous powers. A leader's power is what remains when the three other types of power are subtracted from it.

Mowday (1978) recognized little agreement in the literature on a typology of influence methods. His research of various typologies in a study of elementary principals led him to posit five methods of

influence: threats, legitimate authority, persuasive arguments, rewards or exchange of favors, and providing information in such a way that a recipient is not aware he or she is being influenced.

Tedeschi and Bonoma (1972) acknowledged the difficulty in separating the means of influence from the condition of their success in gaining the source's objective. Nevertheless, they ideally delineated nine means of influence for the source: attempt to utilize information to convince the target to comply, threaten the target with punishments, resort to force, issue promises of reward, modeling of imitative responses, social contagion, manipulation, refusal to make decision, and curiosity behavior.

Kipnis, Schmidt, and Wilkinson (1980) found eight tactics people used to influence others at work: assertiveness, ingratiation, rationality, sanctions, exchange, upward appeals, blocking, and coalitions. Gilman (1962) recognized four methods of control: coercion, manipulation, authority, and persuasion. Falbo (1977) determined sixteen power strategies and Fairholm and Fairholm (1984) identified sixteen power tactics principals can use to influence others to do something, three of which--use of rewards, legitimization, and personality--are part of the French and Raven (1959) scheme.

Harsanyi (1962) suggested four ways that one actor can manipulate the incentives of another: new advantages or disadvantages subject to no condition, rewards and punishments, information, and legitimate authority. Cartwright (1965) presented four broad categories of influence means: physical control over another's body, control over gains and costs a person will experience, control over the information

available to a person, and making use of a person's attitude toward being influenced by an agent.

The idea of a power base as expressed by Dahl (1968) has its roots in Weber's (1947) three types of legitimate authority.

> 1. Rational grounds--resting on a belief in the "legality" of patterns of normative rules and the right of those elevated to authority under such rules to issue commands (legal authority).
> 2. Traditional grounds--resting on an established belief in the sanctity of immemorial tradition and the legitimacy of the status of those exercising authority under them (traditional authority).
> 3. Charismatic grounds--resting on devotion to the specific and exceptional sanctity, heroism or exemplary character of an individual person, and of the normative patterns or order revealed or ordained by him (charismatic authority) (Weber, p. 328).

Guba (1960) determined that an administrator's power was the actuating force in an administrative system. This power was distributed between two behavior determining dimensions--role and person. From his role, the administrator has status and exerts authority; from his person, the administrator has prestige and exerts influence.

> In terms of the role dimension, formal power, which we have termed authority, is delegated and vested in the office irrespective of the person who happens to fill it. In terms of the person dimension, informal power, which we have termed influence, is earned or achieved, and vested in the individual irrespective of the office which he happens to hold (p. 127).

Presthus (1960) determined that authority had several bases of legitimation: technical, expertise, formal role, rapport, and a generalized deference to authority. Whereas Guba (1960) saw the two determinants of role and person as essentially competing demands, Presthus (1960) perceived greater complexity in the relationship.

> While authority may appear to rest upon his formal role, an executive's reliance upon this formal position for legitimation of his leadership is usually a confession of weakness.

> Authority seems more likely to be a contingent grant, received initially as part of formal position but requiring nourishment from other kinds of legitimation as well (p. 88).

Taking a dissimilar approach, Gilman (1962) recognized personal and institutional authority, the latter brought into being to compensate for the deficiencies of personal authority.

Peabody (1962) in a study of the bases of authority from the literature and from an exploratory study of three public service agencies differentiated between formal and functional bases of authority. He divided formal authority into the categories of authority of legitimacy and authority of position and informal authority into authority of competence and authority of person.

Etzioni (1961) defined three kinds of power used to gain compliance.

> Coercive power rests on the application, or the threat of application, of physical sanctions . . . .
> Remunerative power is based on control over material resources and rewards . . . .
> Normative power rests on the allocation and manipulation of symbolic rewards and deprivations . . . (Etzioni 1961, p. 5).

These powers are derived either from specific positions, from personal qualities or from both.

> Personal power is always normative power; it is based on the manipulation of symbols and it serves to generate commitment to the person who commands it. Positional power, on the other hand, may be normative, coercive, or utilitarian (Etzioni 1964, p. 61).

All of these models demonstrate that there are many resources/means available to the person who wishes/needs to exert power. However, making any absolute distinction between them or developing a single typology is difficult if not impossible.

French and Raven Power Base Model

The French and Raven model (1959) is commonly used in research, and many of its elements are repeated in other constructs (Mechanic 1962, Russell 1938, Cartwright 1965, Rubin and Berlew 1984, Mowday 1978, Tedeschi and Bonoma 1972, Kipnis 1976, Lee 1977). French and Raven (1959), while using elements of the role/position model, expanded upon it. They defined a power base as the "relationship between O [the agent] and P [the person] which is the source of that power" (p. 612). Although they recognized the possibility of many bases of power, they defined five which seemed especially common and important.

> Five bases of O's power are: (a) reward power, based on P's perception that O has the ability to mediate rewards for him; (b) coercive power, based on P's perception that O has the ability to mediate punishments for him; (c) legitimate power, based on the perception by P that O has a legitimate right to prescribe behavior for him; (d) referent power, based on P's identification with O; (e) expert power, based on the perception that O has some special knowledge or expertness (French and Raven, 1959, pp. 612-613).

Although French and Raven (1959) introduced informational power as a subset of expert power, it was Raven and Kruglanski (1975) who differentiated it from expert power. They defined this sixth base of power as persuasion. Hersey, Blanchard, and Natemeyer (1979) added a seventh power base--connection power--to the power base typology. "Connection power is based on connections with influential or important people" (p. 419). French and Raven's theory details the effects the five power bases produce in the person upon whom power is exerted. Power is defined as "potential influence" and influence as "kinetic power" (p. 609). Influence is viewed in terms of psychological changes

in behavior, opinions, attitudes, goals, needs, values, and all other aspects of the person's psychological field. The relationship between two parties is viewed as "dynamic dependence" (p. 611) and is presented in terms related to Lewin's (1951) field theory: "a force to change the system in the direction induced by O and an opposing resistance set up by the same act of O" (p. 608).

Despite criticism, the French and Raven typology has become a classic, respected, and influential view of power in social psychology (Kipnis 1976, Falbo 1977, Lee 1977, Henderson 1981). Kipnis (1976) noted three benefits of the French and Raven Model.

> French and Raven's approach has the advantages for psychologists of subsuming a wide variety of social-influence acts under the general rubric of power. Furthermore, it focuses the investigator's attention upon the kinds of resources that are available to the powerholder when attempting to influence others. In addition, it provides very specific predictions about the immediate and long-range effects of invoking various bases of power (p. 11).

Although the typology has been faulted for a lack of empirical basis (Kipnis, Schmidt, and Wilkinson 1980) and for unstandardized categories (Dahl 1968), for being a better conceptual tool than a model of reality (Henderson 1981), for not being conceptually parallel and for neglecting the characteristics of the influencer (Patchen 1974), and for being too narrow a concept of power bases (Patchen 1974, Falbo 1977, Ng 1980), the model has been very widely used in research.

Hersey, Blanchard, and Natemeyer (1979), building upon the work of French and Raven (1959) and Raven and Kruglanski (1975), proposed a seven-power-base typology. Their model presented leadership and power as inseparable concepts. Leadership is the process of influencing the behavior of others, and power is "the leader's influence potential" (p.

418), the means by which a leader gains the follower's compliance (p. 419). Like French and Raven (1959), they were interested in the perception of an agent's power, but whereas French and Raven focused primarily on the reaction of the person upon whom power was exerted, Hersey, Blanchard, and Natemeyer (1979) focused on how these perceptions could affect the utilization of various leadership styles.

The seven power bases of Hersey, Blanchard, and Natemeyer are conceptually similar to French and Raven though they are tied to leader behaviors rather than psychological change. The seven power bases are:

> Coercive power is based on fear. A leader high in coercive power is seen as inducing compliance because failure to comply will lead to punishment, such as undesirable work assignments, reprimands, or dismissal.
>
> Connection power is based on connections with influential or important people. A leader high in connection power induces compliance from others because they try to gain favor or avoid disfavor of the powerful connection.
>
> Expert power is based on possession of expertise, skill, and knowledge. A leader high in expert power is seen as possessing the expertise to facilitate the work behavior of others. This leads to compliance with the leader's wishes.
>
> Information power is based on possession of or access to information that is valuable to others. This power base is influential because others need or want this information.
>
> Legitimate power is based on the position held--the higher the position, the higher the legitimate power. A leader high in legitimate power induces compliance or influences others because they feel that this person has the right, by virtue of position in the organization, to expect compliance.
>
> Referent power is based on personal traits. A leader high in referent power is liked and admired, and others wish to be identified with him or her.
>
> Reward power is based on ability to provide rewards. Followers believe that their compliance will lead to pay raises, promotions, recognition, or other rewards (Hersey, Blanchard, and Natemeyer 1979, p. 419).

Power Base Typology in Business, Industry, and Higher Education Settings

French and Raven's (1959) power base typology has been widely used in business, industry, and higher education to measure why subordinates comply with their superiors' requests. The typology also was used to measure the relationships between power base use and employee satisfaction (Bachman, Smith, and Slesinger 1966; Bachman 1968; Bachman, Bowers, and Marcus 1968; Bullock 1968; Ivancevich 1970; Slocum 1970; Burke and Wilcox 1971; Cope 1972; Natemeyer 1975), job performance (Bachman, Smith, and Slesinger 1966; Ivancevich and Donnelly 1970; Slocum 1970; Natemeyer 1975), production (Student 1968), total control (Bachman, Smith, and Slesinger 1966; Bachman, Bowers, and Marcus 1968), behavior and reputation (Lord 1977, Gioia and Sims 1983), job tension (Sheridan and Vredenburgh 1978), self-esteem (Adler 1983), the relationship between leader behavior and subordinate performance and satisfaction (Natemeyer 1975), and interpersonal influence in purchase decisions (Patchen 1974). All data gatherings except one (Patchen 1974) used the French and Raven typology directly or indirectly to measure power bases. The two most common devices were the rank ordering of the power bases (Bachman, Smith, and Slesinger 1966; Bachman 1968; Bachman, Bowers, and Marcus 1968; Bullock 1968; Burke and Wilcox 1971) and a single-item rating scale of each power base (Student 1968; Ivancevich 1970; Ivancevich and Donnelly 1970; Slocum 1970; Cope 1972).

In nine of the ten studies in which the power bases were ranked according to the employees' perceptions of the usage of power bases (Bachman, Smith, and Slesinger 1966; Bachman 1968; Bachman, Bowers, and

Marcus 1968; Bullock 1968; Student 1968; Ivancevich 1970; Ivancevich and Donnelly 1970; Slocum 1970; Burke and Wilcox 1971; Cope 1972), expert and legitimate power appeared as the power bases most used. Coercive power generally appeared as the least used. This pattern was broken in only one study; Cope (1972) in a study of faculty and department chairpersons in a university found that faculty in a non-stressed department perceived greater emphasis on chairpersons' uses of referent, expert, and legitimate power while faculty in stressed departments--those with internal friction--perceived more emphasis on expert, reward, and coercive influence. Expert power was perceived as most used in five studies (Bachman 1968, Bullock 1968, Ivancevich and Donnelly 1970, Slocum 1970, Burke and Wilcox 1971) and legitimate power in three (Bachman, Smith, and Slesinger 1966; Student 1968; Ivancevich 1970) with the two tied in one study (Bachman, Bowers, and Marcus 1968).

Employee/subordinate satisfaction was the variable most often correlated with power base use. Expert and referent power were the two power bases most consistently positively correlated with satisfaction (Bachman, Smith, and Slesinger 1966; Bachman 1968; Bachman, Bowers, and Marcus 1968; Bullock 1968; Ivancevich 1970; Slocum 1970; Burke and Wilcox 1971; Cope 1972; Natemeyer 1975). In these same studies coercive power always was negatively correlated, usually significantly, with satisfaction. Legitimate and reward power bases appeared significantly related both positively and negatively to satisfaction in these studies. Furthermore, expert and referent power bases also were related positively to total control and performance (Bachman, Smith,

and Slesinger 1966; Bachman, Bowers, and Marcus 1968; Student 1968; Ivancevich and Donnelly 1970; Slocum 1970).

Studies using the French and Raven typology in a different fashion found that expert and legitimate power and, only occasionally, referent power were the only bases mentioned as being influential in purchase decisions (Patchen 1974). Lord (1977) investigated the impact of social power on functional leadership behavior. He found that legitimate, expert, and coercive power were most related to functional leadership behaviors and to effectiveness. Sheridan and Vredenburgh (1978) found that reward and expert power had a significant inverse relationship to the job tensions of nurses. Adler (1983) excluded legitimate power in his construct of instrumental power bases (reward, coercive, and expert) and expressive power bases (referent) in a study of modeling. He found a significant, positive relation between self-reported behavior between supervisors and subordinates and perceived supervisor reward and coercive power for subordinates with high self-esteem but not for those with low self-esteem. Expressive power was significantly and positively related to those low in self-esteem. Expert power was not related to either group as a basis for modeling. Finally, Gioia and Sims (1983) in a study of how managerial behaviors influenced the power perceptions of observers found that overt managerial behavior had a strong influence on the perceptions of reward and coercive power and a smaller but significant influence on legitimate, expert, and referent power. Managerial reputation also influenced the perceptions of expert, referent, and legitimate power bases.

Power Base Typology in Elementary and Secondary Educational Settings

Educational researchers also have studied the use of power in public schools. The focus of this section is on a principal's power base use and its relationship to selected variables in K-12 school settings. Twenty-four studies relate to the topic. The first three studies relate to principal power use in a general way. The next 21 studies specifically relate to teacher perceptions of the power base use of a principal. Researchers have approached the study of power in K-12 settings from so many perspectives that it is difficult to make meaningful comparisons among them. The differences in these perspectives are due to the various typologies proposed to examine the sources of power, the conflicting interpretations of the power bases, and the differing methodologies, samples, and purposes.

Three studies viewed power base use from the perspective of the principal (Harbour 1979, Dey 1980, Sullivan 1981). The three studies have little in common except for a similar construct for examining power bases. However, Harbour (1979) and Sullivan's (1981) studies, though conducted on quite different subjects, do provide some insight into the principal's perspective on power base use. Dey (1980) measured the relationship between the need for power, achievement, and affiliation and the self-perception of power in 23 male and 21 female elementary principals. No significant relationships were found.

Harbour (1979) converted French and Raven's five power bases into 15 hypothetical work situations with 89 past, current, and aspiring school administrators and administrators in non-educational settings to examine the consequences experienced by the powerholder in

the exercise of French and Raven's five power bases. She found that the powerholder had a more positive attitude toward him/herself than the target of influence in the exercise of each of the five bases of power, the powerholder's attitude toward the target of influence was more positive in the expert power base than in any other power type, the powerholder's attitude toward self was equally more positive in the referent and expert power bases than in any other power base, and the powerholder's attitude toward self--when compared to that of the influence target--was most positive in the exercise of referent power and least positive in the exercise of reward power.

Sullivan (1981) in a study of 80 elementary principals used French and Raven's typology to examine the relationship of the base of power the elementary principal employed to achieve the goals of the school and his/her sense of professional independence to the degree of participatory management. He found that a principal tended to identify him/herself as having a dominant expert or referent power base, a principal did not wish to relinquish control of major decisions to the professional staff, a principal with an expert or referent base of power and a high degree of independence was more apt to involve staff in the decision making process of the school, a principal with a fund of knowledge and good rapport with staff saw his/her responsibility as the final authority in decisions, and principals viewed human relations as a concept that promoted limited involvement by staff and espoused harmonious working relations.

A number of studies have examined the ways in which principals gain compliance from their teachers. Four models that have appeared in

the literature follow. Porter (1986) examined teachers' perceptions of their principals' uses of seven power strategies identified by Kipnis, Schmidt, and Wilkinson (1980). From most often to least often, principals used rationality, ingratiation, upward appeal, coalitions, exchange, assertiveness, and sanctions. She found that the frequency with which the various power strategies were used by principals affected teaching and learning climates.

The second compliance model consists of three subcategories of the general concept of power: coercion, authority, and influence (Muth 1973, 1984; Thom 1977). The authors of these studies theorized that these power behaviors existed on a continuum and that differing uses of power produced differing results.

The third compliance model consists of the Peabody (1962) model of formal and functional authority utilized by Hammond (1984) and a similar construct of formal and informal authority derived from a combination of Weber (1947) and French and Raven (1959) and utilized by Isherwood (1973) and Sidotti (1976). The Peabody model subclassified formal authority bases into legitimate and position bases and functional authority bases into competence and person bases. In the formal-informal authority model, formal authority rests upon traditional and legal bases and informal authority rests upon charismatic, expertise, normative, and human relations skills.

The fourth and most common model is the French and Raven model (1959) of five power bases and its expanded seven power base form of the Hersey, Blanchard, and Natemeyer model (1979). These models were used to measure teacher perceptions of principal power base uses in 15

studies. In seven of the studies (Hornstein et al. 1968, Warren 1968, Eaker 1976, Kappelman 1981, Richardson and Thompson 1982, DeRose 1985, Parham 1985) power bases were correlated with other variables and were not ranked. In eight of the studies (Balderson 1975, Ringrose 1977, Guditus and Zirkel 1980, Hoover 1980, Richmond et al. 1980, Copes 1982, High and Achilles 1986, Stimson and Appelbaum 1988) power bases were correlated with other variables and were rank ordered. In all studies where power bases were rank ordered, either expert or legitimate power was the power base perceived as being used most often, with expert power predominating. Referent power appeared next in line, although twice it superseded either expert (Richmond et al. 1980) or legitimate power (Stimson and Appelbaum 1988). Reward, coercion, and connection powers were perceived as being used least often. This pattern generally parallels the rankings found in business, industry, and higher education settings as cited earlier.

Researchers studying principal power base usage have been most interested in its effect upon school related variables. Only seven of the variables have two or more supporting studies, while 13 of the variables have only a single supporting study. As a result, comparisons between studies often are difficult to make.

Many of the variables studied in relationship to principal power base use appeared in single studies only. Ringrose (1977) found that principals who were perceived as having expert power received higher scores in the area of trust than principals who were perceived as having legitimate power. Thom (1977) found a relationship between principals' power behaviors and their evaluations of teacher perfor-

mance. Influence behaviors related negatively to evaluation conflict, and coercive behaviors related positively to evaluation conflict. Guditus and Zirkel (1980) compared the institutional and interpersonal control of principals with office managers and found that office managers seemed to have a higher average level of control than principals. Significant positive relations between the various types of control and teacher satisfaction also were found.

Richardson and Thompson (1982)--using a self-developed instrument based on the Hersey, Blanchard, and Natemeyer model (1979)--examined the relationship between 70 principals' levels of ego development and their uses of power bases. They found no significant differences in the patterns of power base use by principals grouped according to ego development.

Eaker (1976) found a significant correlation between teachers who tended to be more self-actualized and their perceptions of how power resources limited autonomy in the classroom. Warren (1968) looked for the relationship between power base use and social control defined as attitudinal and behavioral conformity, the relationship between the visibility of role performance in the exercise of power and high or low effectiveness, and power effects on staff professionalism. His findings did not support a linear relationship between a given form of power and effective social control. Each of French and Raven's (1959) five power bases elicited a different kind of conformity and varied in effectiveness according to the visibility of the task. Schools with multiple power bases were characterized by higher levels of conformity to the teaching approaches of the principal than schools

with few power bases. Coercive and referent power bases were the most significantly correlated with the total level of conformity. They appeared as the most effective power bases in causing teachers to use the approach preferred by the principal in four areas of teacher performance. Coercive power was the only power base significantly correlated with behavioral conformity under conditions of high visibility. Staff professionalism was generally negatively related to conformity to the power approach of the principal. Highly professional staff, however, did respond positively to expert, to referent, and especially to legitimate power. On the other hand, in schools with less professional staffs, conformity was positively related to coercive and referent power. High visibility was antithetical to professionalism, and highly professional staffs were found to be less subject to the control of the principal.

High and Achilles (1986) discovered that there were perceived differences between the influence-gaining behaviors of principals in high achieving schools and principals in other schools. Hornstein et al. (1968) found that the more influence teachers perceived for themselves or for their principals, the more favorable was their evaluation of the school system and the greater was the tendency to perceive students to be more satisfied with their teachers. Their results also suggested that power is not a fixed quantity. They reported that when teachers perceived their principal's level of influence to be high, they were likely to perceive their own level of influence to be relatively high. Additionally, they found that the amount of influence teachers attributed to their principal was associ-

ated with their perception of the principal's basis of power. Referent and expert power tended to be positively related to a principal's total influence whereas reward, coercive, and legitimate power all were negatively related. Porter (1986) reported that an elementary principal's choice of power strategies directly affected school climate. An open climate was related to teachers' perceptions that their principals used rationality and ingratiation significantly more often and assertiveness and sanctions significantly less often than principals in closed climate schools.

Two studies were related to teacher perceptions of principal power base use and effective school operations. Balderson (1975) reported that schools with principals high in expert power received high scores for the degree to which the principal favored teachers (1) doing an effective job helping students learn, (2) experimenting with new ideas and techniques, and (3) suggesting ideas to improve the school. Copes (1982) reported no relationship between management systems and type of power utilized by principals in secondary schools although he did find a relationship in one of twelve schools between the perceptions of teachers and that of the principal regarding the school's management system. He suggested that a principal's use of legitimate power would produce the most effective management system.

Three studies were related to teacher perceptions of principal power and teacher loyalty. Isherwood (1973) reported that formal authority was negatively and significantly related and that informal authority was positively and significantly related to teacher loyalty to the principal. Sidotti (1976) reported that principals who scored

high in informal authority and low in formal authority had teachers with a higher degree of loyalty than those who scored low in informal and high in formal authority. Hammond (1984) reported that both formal and functional power were positively related to teacher loyalty. Three studies examined conflict and consensus. Muth (1973), Thom (1977), and Hoover (1980)--in a replication of Muth--found coercion positively related to conflict, influence positively related to consensus, and authority positively--but not strongly--related to consensus. Hoover (1980) found no relationship between a teacher's perception of an administrator's power and the administrator's conflict management style.

Four studies were concerned with the relationship between teacher perception of principal power and teacher alienation and sense of powerlessness. In an exploratory study, Isherwood (1973) found that a principal's use of formal authority was positively and significantly related and informal authority was negatively and significantly related to teacher sense of powerlessness. Sidotti (1976) found that teachers' sense of powerlessness scores were significantly lower with principals using high informal-low formal authority than with principals using low informal-high formal authority. Hammond (1984) reported that formal power was positively related and functional power was negatively related to teacher sense of powerlessness. DeRose (1985) found no significant relationship between number of power bases used by secondary principals and the degree of teacher alienation. High uses of personal-professional power and--to a lesser degree--reward power combined with low usage of organizational-professional power reduced

teacher powerlessness. Teachers who experienced a high degree of powerlessness and a low sense of social isolation experienced a greater use of reward power on the part of their principals.

Four studies were related to principal leadership and management style. Ringrose (1977) found that principals perceived by teachers as having expert power had higher leadership scores than principals perceived as having legitimate power. Richmond et al. (1980) examined differential usages of the five bases of power to determine which bases of power mediated the Management Communication Style (MCS)--tell, sell, consult, and join--of a teacher's supervisor. MCS was significantly negatively associated with coercive power. Teachers associated increased referent and expert power with perceptions of more employee-centered MCS. Reward power was not a mediating factor in teacher perceptions of MCS. Kappelman (1981) found a significant relationship between a principal's power base and his/her leader behavior as perceived by teachers. Referent and coercive power bases were related to the leader behaviors of consideration and predictive accuracy. Copes (1982) reported a weak but significant relationship between the perceptions of teachers and that of the principal with respect to the school's management system.

Five studies were related to principal power usage and teacher involvement in participatory decision making. Hornstein et al. (1968) found that when teachers perceived their principal's level of influence to be high, they were likely to perceive their own level of influence to be high. This finding suggested teacher involvement in decision making. Balderson (1975) found that principals high in expert power

favored teachers suggesting ideas to improve the school. Schools with principals high in expert power also received high scores for the degree to which teachers felt that their principals were open to their ideas and for the degree to which they felt that their principals had delegated enough authority to teachers to enable them to do their work. Likewise, schools with principals perceived as expert received low scores from teachers for the degree to which they felt that they had to accept things the way they were in their school and for the degree to which they felt like cogs in a machine. In similar fashion, Ringrose (1977) found that principals having expert power appeared to stimulate team performance by involving teachers in decision making and goal setting. DeRose (1985) found that high uses of personal-professional power and--to a lesser degree--reward power, combined with low usage of organizational-professional power, enhanced teacher involvement. In-depth interviews with teachers conducted by Stimson and Appelbaum (1988) revealed that principals could best influence teachers by involving them in decision making: "When the teachers in our sample believed that their principals cared about their opinions and responded to their concerns, the principals' influence increased" (p. 316).

Teacher satisfaction was the variable examined most frequently in relationship to teachers' perceptions of their principal's power base usage. Of the eleven studies, five presented power base rankings; however, six did not. Hornstein et al. (1968) studied 325 primary school teachers in 14 schools in two districts. They used the same question utilized by Bachman, Smith, and Slesinger (1966) in their study of power base use by business managers to rank order French and

Raven's (1959) five power bases. Satisfaction with the principal was measured by asking how satisfied teachers were with the way the principal was doing his job. Analysis was conducted on both group and individual level effects since the researchers believed that satisfaction was influenced by two different levels of effects. They found that higher within-building and interpersonal influence for teachers and principals and a reliance on an expert power base were associated with greater satisfaction with the principal. Results were the same for group and individual level effects though individual level effects were stronger. Additionally, although principal power bases were not ranked, they were related to principal influence. The amount of influence teachers attributed to their principal was associated with their perceptions of his/her basis of power. Referent and expert power tended to be positively related to total principal influence whereas reward, coercive, and legitimate power all were negatively correlated to it.

Isherwood (1973), in an exploratory study of the relationship between a principal's authority and teacher satisfaction in 15 secondary schools, used a different format for studying principal power usage. He combined the concepts of authority developed by five different authors with the French and Raven concept of power in the development of a five-point rating scale for six variants of authority. Job satisfaction was measured by five Likert-type items where teachers indicated on a five-point scale how satisfied they were with relationships with student academic performance, student behavior, peer relationships, relationships with school administrators, and how the

school was operated. Instruments were given to six-to-eight teachers who were unassigned to teaching at the time of the visit. He found that formal authority (traditional and legal authority) was negatively and significantly related to teacher sense of job satisfaction and that informal authority was positively and significantly related to teacher job satisfaction.

Sidotti (1976) studied the relationship between elementary school principals' sources of authority and teacher satisfaction. The questionnaire was completed by 756 teachers in 40 public elementary schools in five counties. He used an instrument similar to Isherwood's to measure the bases of principal authority and the Teacher Job Satisfaction Inventory to measure how satisfied teachers were with student academic performance, student behavior, relations with school administrators, support by the school principal in parental situations, and the general operation of the school. This measure also closely followed measures used by Isherwood (1973). He found that principals who scored high in informal authority and low in formal authority had teachers with a higher degree of satisfaction than those who scored low in informal and high in formal authority. No difference in teacher satisfaction was found for principals high in both authority dimensions. Teacher job satisfaction scores were for the most part identical for principals using low informal-high formal and low informal-low formal authority bases.

Hammond (1984) examined teachers' perceptions of the bases from which their principals attained power of authority and how those related to teacher satisfaction. The bases of power examined were

those developed by Peabody (1962) (formal and functional authority). The survey instrument was the same one used by Isherwood (1973) to measure authority bases and satisfaction. Responses were received from 1,161 teachers in 31 secondary schools in three counties. Functional power (competence and person) was positively related to teacher job satisfaction in accord with the findings of Isherwood (1973) and Sidotti (1976).

Parham (1985) studied the relationship between job satisfaction/dissatisfaction of secondary teachers in 22 schools and their perceptions of the bases of power of principals. Two self-developed instruments were used, one to study perceptions of and need for hygiene and motivator variables and the other to elicit why teachers complied with requests from superiors. None of the power base variables emerged as significant predictors of the motivator or hygiene factors.

Porter (1986) and Porter and Lemon (1988) studied teacher perceptions of principal uses of seven power strategies and their relationship to school climate in fifty schools in two states. A survey instrument was used based upon the work of Kipnis, Schmidt, and Wilkinson (1980) to gather information about teachers' power perceptions and the Organizational Climate Description Questionnaire to identify school climate characteristics. Rationality and ingratiation were the power strategies used most frequently; these strategies had the most positive effect on school climate, but when principals used great amounts of rationality without corresponding amounts of ingratiation, teachers reported satisfaction with the job but little satisfaction with other staff members. Although teachers perceived principals

rarely to use assertiveness and sanctions, the slightest use of them produced negative teacher perceptions.

Five studies presented principal power base ranking results and teacher satisfaction responses. Balderson (1975) studied relationships between the types of power principals were perceived to exercise and staff responses to issues pertinent to the operation of effective schools. He surveyed 426 teachers in 41 elementary schools. Teachers were asked to select the statement, based on French and Raven's five power base typology, which best described why they cooperated with their principals' requests. Items related to teacher feelings, the principal, and school organization and operation were included in the survey. Teachers in 56% of the schools viewed the principal as using expert power. When the researcher combined "pure" and "mixed" [expert plus another power base] categories of expert power, teachers in 73% of the schools viewed the principal as using expert power. The reward power category was empty. Balderson found that schools with principals high in expert power received high scores for teacher satisfaction with the principal's performance. The focus for comparison was on schools with expert-power principals because they formed the largest category and because the author believed this power base was of particular value to principals and their schools. Conversely, schools with principals who were perceived to use coercion reported the lowest scores on the satisfaction variable.

Ringrose (1977) studied the relationship between teachers' perception of the bases of power used by selected elementary principals and the management systems of the school. The subjects consisted of

300 elementary teachers and 20 elementary principals. An instrument comprised of 25 questions related to contemporary school issues which were delineated into descriptions of leadership behavior and which were based on the French and Raven typology was used to gather power base data. A separate questionnaire was used to gather data about the school. Self-perceptions of principals regarding their power base uses generally matched the perceptions of the teachers. Although she found no difference in organizational climate between principals perceived as having expert rather than legitimate power, Ringrose concluded that both power bases seemed to generate satisfaction. Another finding supportive of the relationship between expert power and satisfaction was her determination that principals who were perceived as having expert power received higher scores in the area of trust than principals perceived as having legitimate power.

Guditus and Zirkel (1980) sought to determine if the pattern of influence of the bases of power which appeared in previous research would be manifest in the 1970s in a broad sample of public school teachers and if discernible differences would emerge in relation to situational subcategories. More specifically they sought to determine how teachers' perceived levels of control and satisfaction related to the bases of power used by principals. They sampled 619 elementary and secondary teachers in 64 schools in a variety of settings in two states. Data on power base uses were collected using the Bachman instrument (Bachman, Smith, and Slesinger 1966) used in business and college settings which asked teachers to rank order the five power bases of French and Raven according to their importance as reasons for

complying with the requests of their principals. Satisfaction was measured by asking agreement or disagreement on a five-point scale with a general statement about how satisfied teachers were with the way the principal was doing his/her job. Findings were similar to those in business, industry, and higher education. Legitimate and expert power were perceived as being most influential and coercive as being least influential. This ordering prevailed in all settings. There was a slight variation in school level; secondary teachers registered a last place tie between coercive and reward power. Satisfaction was measured by school site by correlating teacher satisfaction scores with the means of the power bases for each school. They found a high positive relationship between teacher satisfaction with the principal's performance and teacher preference for the principal's use of referent and expert power. They found strong negative correlations between teacher satisfaction and the principal's perceived use of coercive power and reward power and a somewhat lesser negative correlation with legitimate power. Satisfaction results on both the group and individual level were similar to those in previous studies in school and non-school settings.

Richmond et al. (1980) examined differential usage of French and Raven's five bases of power to determine which bases mediated the Management Communication Style of a supervisor and examined the relationship between supervisor communication of each type of power and employee satisfaction. Two samples were used--171 business managers and 250 elementary and secondary public school teachers from 39 districts in seven states who were in graduate classes. Three instru-

ments were used. Power bases were measured by a researcher-designed instrument composed of five seven-point, bipolar scales for each type of power in order to estimate internal reliability of responses. Job satisfaction was measured by the Job Descriptive Index and management communication style by a self-developed instrument of the same name. They found that communication of coercive power was negatively associated with employee satisfaction on four of five satisfaction dimensions. Expert and referent power were positively correlated with employee satisfaction in four of the five satisfaction dimensions. None of these correlations, however, was statistically significant.

Stimson and Appelbaum (1988) studied the type of power that principals used, the relationship between principal personal power use and staff regard for the principal, and the relationship between principal personal power use and staff satisfaction with their work and the way it was supervised. Twenty-three elementary principals and 132 elementary teachers in 54 schools took part in the study. Principals and teachers completed the Power Perception Profile-Self and Other to measure power styles and the Cornell Job Description Index to measure satisfaction. Indepth interviews with some teachers and principals also were conducted. Teachers were more satisfied with principals who relied on personal power. All three power bases correlated positively with satisfaction; two of them, expert and referent, were statistically significant. All of the positional power styles were negatively correlated with teacher satisfaction; three of the four--coercive, legitimate, and connection--were statistically significant. It was

found that the most satisfied teachers were those who worked under principals who clearly understood their own power styles.

This review of the literature has revealed that there is no single correct--or even agreed upon--way to examine the concept of power. Definitions, methods, and conceptualizations all vary. Though many researchers have decried a lack of uniformity, Dahl (1957) suggested that there could be no single approach to power that could explain all phenomena and that, therefore, varied approaches were necessary.

> . . . we are not likely to produce--certainly not for some considerable time to come--anything like a single, consistent, coherent "Theory of Power." We are much more likely to produce a variety of theories of limited scope, each of which employs some definition of power that is useful in the context of the particular piece of research or theory but different in important respects from the definitions of other studies. Thus we may never get through the swamp. But it looks as if we might someday get around it (p. 202).

This researcher followed Dahl's suggestion by demonstrating how one concept of power--the power base typology--can be used to explain teacher-principal relationships in educational settings. Though often used--and sometimes criticized for their simplicity--power bases are a real and meaningful way of gathering data and providing understanding about relationships between people in organizations. It is only through repeated use of models over time and in different settings that some "truths" about power may emerge and eventually may get us "around the swamp."

The following chapter will present the methodology and instruments used in this study.

CHAPTER III

METHODOLOGY

In this study teachers in all 17 schools in a large North Dakota school district were given an instrument to measure their perceptions of their principal's power base usage against their ideal of their principal's power base usage. These differences resulted in descriptive and statistical analyses of principal power base rankings and of satisfaction with principal power base use. Ten background variables were analyzed statistically for teacher satisfaction with principal power base use. Follow-up interviews were conducted with principals to share results and elicit responses.

Research Questions

Two general research questions and 10 more specific questions were developed to examine teacher perceptions of power base use by principals and teacher satisfaction with these power base uses.

1. How do teachers perceive the power base use of their principals?

2. How satisfied are teachers with the perceived power base use of their principals?

    a. Is there a relationship between teacher gender and teacher satisfaction with perceived power base use of principals?

b. Is there a relationship between teacher marital status and teacher satisfaction with perceived power base use of principals?

c. Is there a relationship between teacher age and teacher satisfaction with perceived power base use of principals?

d. Is there a relationship between school level and teacher satisfaction with perceived power base use of principals?

e. Is there a relationship between total years of teaching experience and teacher satisfaction with perceived power base use of principals?

f. Is there a relationship between years of teaching experience under the current principal and teacher satisfaction with perceived power base use of principals?

g. Is there a relationship between teachers whose principals already were in their current positions when the teachers assumed their current teaching positions and teacher satisfaction with perceived power base use of principals?

h. Is there a relationship between the degree to which teachers think their principals attempt to use influence differently on the basis of teacher gender, age, and teaching experience and teacher satisfaction with perceived power base use of principals?

i. Is there a relationship between perceived teacher influence on school operations and teacher satisfaction with perceived power base use of principals?

j. Is there a relationship between teacher satisfaction with communication with the principal and teacher satisfaction with perceived power base use of principals?

Subjects

The subjects were drawn from all elementary (K-6) and secondary (7-12) teachers in a large North Dakota school district who attended faculty meetings or specially called meetings held in their schools and who were willing to complete the research instrument. For the purposes of this study, junior high schools (7-9) were considered to be secondary schools since their curricula, organization, and general orientation were more like high schools than elementary schools. The one school in the district that was K-8 was treated as an elementary school in descriptions and analyses of power base rankings since most of the teachers performed elementary level functions; likewise, for analysis of background variables, all teachers in that school were treated as elementary.

Of 544 teachers, 410 participated; 225 of 318 elementary teachers and 185 of 226 secondary teachers participated for a total of 75.4% of all teachers in the district. There were 379 usable responses from those who participated; 215 elementary teachers and 164 high school teachers for a total of 69.7% of all teachers in the district. Numbers of teachers participating per school ranged from 6 to 45 and the percentage of teachers participating per school ranged from 60% to 94.1%.

Instruments

The Power Perception Profile (PPP) was developed by Paul Hersey and Walter E. Natemeyer in 1979 to provide leaders with feedback regarding their power base usage. Two versions of the instrument were made available: one to measure self-perception of power bases (Power

Perception Profile-Perception of Self) and the other to measure an individual's perception of the power bases of another (Power Perception Profile-Perception of Other). The latter was the version used in this study in order to assess teacher perceptions of principal power base use.

The PPP consists of 21 forced-choice pairs of items that describe reasons commonly given by individuals regarding why they follow the suggestions or directives of their leaders. Each statement is formulated to reflect one of the seven power bases: coercive, connection, expert, information, legitimate, referent, and reward. Five power bases were adapted from French and Raven (1959); information power was derived from later work by Raven and Kruglanski (1975), and connection power was developed by Hersey, Blanchard, and Natemeyer (1979). Respondents are asked to assign three points between each set of two alternative choices basing their judgments on why they comply with their leaders' wishes. Thus a score is obtained that indicates the relative strength of each of the power bases. This score represents the respondent's perception of the power base use of the leader.

The test developers attempted to address a difficulty inherent to forced-choice instruments by asking respondents to compare their leaders with other leaders whom they have encountered in similar positions. In this way some perceived comparison or rating relative to others could be obtained.

Little research has been conducted regarding the PPP itself (Delaney 1980, Richardson and Thompson 1981). One study suggested that its primary utility and appropriateness was in its use as a training

tool to stimulate discussion between managers and subordinates (Delaney 1980). In that study, overall validity for the definitions and descriptions of the instrument were moderate with 79% and 75% agreement rates, respectively. Descriptions of two power bases, legitimate and referent, were found to be ambiguous. Test-retest reliability coefficients derived from the Spearman-Brown formula were judged to be low ranging from -.27 to .70. Only the expert power base descriptor received an acceptable rating. With an overall reliability of .52 the instrument was determined "of value" primarily as a training tool. Use of the instrument for individual diagnosis or research was discouraged at that time. The need for further research on the instrument was indicated.

Richardson and Thompson (1981) in a comparison of the PPP with their own instrument, the Richardson Power Profile, also concluded that the Hersey-Natemeyer instrument's primary use was training rather than research because of its brevity. They further pointed out that the PPP is not purely ipsative since points are distributed between two bases, and they recommended that the exact consequences of such a distribution be examined further.

Despite its limitations as a research instrument, the PPP has been used in recent studies regarding the power base styles of school administrators. It has been used to study school administrator power base and conflict management style (Hoover 1980), power motivation (Dey 1980), and teacher perceptions of principal power styles (Stimson and Appelbaum 1988). It also has been used to measure the validity of other instruments designed to measure teachers' perceptions of admin-

istrators' power base use (Richardson and Thompson 1981) as well as power base preferences of educational administrators (Shah 1981). It was selected for usage in this study largely due to the convenience and utility of its incorporation of the widely accepted classification system of the French and Raven model. Its use of that typology, expanded to include two additional power bases, provides information on individual power base styles that affords a common language for discussion and comparison within the field. The brevity and simplicity of its administration and scoring further contributed to its pragmatic value in this particular study.

For this study, the researcher used only the first two pages of the four-page Power Perception Profile-Perception of Other. These two pages contain the directions and the actual statements. The description of the power bases on page three were deleted so as not to influence and/or confuse the respondents. The researcher sought a response to statements which minimized second-guessing and value judgments that might occur if the respondent knew that a given choice indicated a given power base. The researcher wanted a direct response to perceived principal power base behaviors rather than an attempt to categorize the behavior. The fourth page also was eliminated because the researcher was not interested in teachers comparisons of their principal with other principals since there would not be a single point of reference for such comparisons.

In addition to the Power Perception Profile-Perception of Other, the respondents completed a brief background questionnaire (appendix A). Teachers reported their gender; marital status; age;

school level; years of teaching experience; years of teaching experience under their current principal; whether or not their principals were in their current position when they assumed their current teaching positions; the degree to which they believed their principals attempted to use influence differently on the basis of teacher gender, age, and teaching experience; how much influence they felt they had on how their schools were run; and how satisfied they were with the communication they had with their principals.

Data Collection

The researcher completed a request to conduct research in a large North Dakota school district as mandated by the district and met with the assistant superintendents for elementary and secondary education to explain the nature of his proposal. These assistant superintendents approved the request and then arranged for the researcher to meet with all district principals at a monthly inservice meeting to explain his project to them and to elicit their cooperation. Cards were distributed to all principals present requesting them to list possible dates and times for the researcher to meet with their teachers to administer the instrument. The assistant superintendent for elementary education followed up the meeting with a letter to principals absent from the meeting requesting their cooperation. Following the inservice meeting, the researcher scheduled data-gathering sessions at faculty meetings.

The researcher completed a Human Subject Review form required by the university assuring that project participants would not be at risk from the data collection and began contacting principals to

arrange data collection dates. Principals scheduled time for data collection at regular faculty meetings or called special meetings. In four cases the researcher met with the principals at their schools to explain his project in more detail. All 17 schools participated in the data gathering which took place in each school between January 28 and April 15, 1985.

Because of infrequent and often simultaneous faculty meetings in different schools, the researcher enlisted the assistance of a doctoral colleague to collect data. The researcher developed a script and set of instructions for his colleague to ensure that no bias would occur in the data gathering due to difference in format.

The researcher or, in five schools, his colleague attended faculty or specially arranged meetings. They explained who they were, the purpose and nature of the research, provisions for anonymity, and the time required. It was emphasized that teacher participation was voluntary. The teachers who normally attended such meetings and who were willing to participate in the survey constituted the subjects. Response sheets with the background questionnaire and blanks to record responses to the instrument were distributed and explained. The directions on the Power Perception Profile-Perception of Other were read aloud to participants and an example provided to facilitate correct completion. Teachers were directed to respond to all items in terms of their principals only since there were too few associate principals in the district from which to draw meaningful comparisons.

Each response sheet had identical sets of answer boxes located on the front and back of the sheet (appendix A). Respondents were

asked to answer all instrument items twice. First they were asked to respond to all the statements according to how they perceived their principals to actually use power; next they were asked to answer the items again in terms of how, ideally, they would like their principals to use power. Completion of the instrument took approximately 15 minutes. The researcher collected all instruments and response sheets at the conclusion of the testing.

Data Analysis

The data were analyzed via the mainframe computers at the University of North Dakota and St. Cloud State University (St. Cloud, Minnesota). Profiles were developed of teacher perceived actual and desired ideal power base usage of all district principals by school, school level, and district-wide. Means were determined by each actual and ideal power base by totaling the number of points allotted to each power base in the Power Perception Profile-Perception of Other. Scores from 0-18 were possible from each power base. Power bases were then ranked from high to low on actual and ideal scales, and actual-ideal score differences were calculated and statistically analyzed to determine if there were any significant differences between them. Significant differences were established by means of t-tests for matched pairs of each principal by school, school level, and district-wide. These profiles became the bases for the follow-up interviews with all district principals.

Each of the 42 actual scores was paired with each of the 42 ideal scores. The differences between each actual and ideal pair were calculated and these differences were added to create a total dif-

ference (d-score) for each respondent. This d-score, with a possible range from 0-126, was used as the measure of teacher satisfaction with the perceived use of principal power. Low scores reveal high satisfaction and high scores reveal low satisfaction. The d-scores were used both as general and as specific measures of satisfaction. As a general measure, d-scores reflected teacher satisfaction with principal power use based on the range of d-scores and on the frequency distribution of teacher d-scores divided into score ranges. As a specific measure, the d-scores were used to study the relationship of satisfaction with background variables.

Satisfaction scores (d-scores) for teachers were analyzed statistically with the independent variables from the background questionnaire: gender; marital status; age; school level; teaching experience; years of teaching experience under their current principal; whether or not the principal was in his current position when the teacher assumed his/her current teaching position; the degree to which teachers believed their principals attempted to use influence differently on the basis of teacher gender, age, and teaching experience; how much influence teachers felt they had on how their schools were run; and how satisfied teachers were with the communication they had with their principals.

Gender, school level, and condition of hiring were analyzed by t-tests. Marital status was analyzed by an analysis of variance. The following were analyzed using the Pearson product moment correlation to correlate satisfaction scores (d-scores) with age; teaching experience; teaching experience under the current principal; the degree to which teachers believed their principals attempted to use influence dif-

ferently on the basis of teacher gender, age, and teaching experience; how much influence teachers felt they had on how their schools were run; and how satisfied teachers were with the communication they had with their principals. Since the primary purpose of this study was to determine teachers' satisfaction with their own principal's power, no attempt was made to compare power base usage among principals.

Supplemental Data

After the researcher gathered and analyzed data relating to teacher perceptions of the actual and ideal power base usage of their principals, he developed four follow-up questions for use in discussing research data with the principals. He then met with each of the principals to share with them their power base profiles as perceived by their teachers. He also asked principals to respond to four questions: (1) Did the principal perceive his profile to accurately reflect his self-perception? (2) Could the principal suggest any reasons for discrepancies between actual and ideal power bases reported by teachers? (3) Did the principal presently consider himself to be more or less powerful in carrying out his functions than he did when he began his administrative career? and (4) How useful, if at all, did the principal consider this profile data to be?

A summary of the responses of the principals is reported in appendix B. Results of these interviews are not reported in chapter 4 because they were not considered to be integral to the study.

The following chapter presents the analyses of the data collected from the instrument and the questionnaire. The results are presented in tabular and narrative form.

CHAPTER IV

ANALYSIS OF THE DATA

This chapter presents research data used to examine (1) how elementary and secondary school teachers in a large North Dakota school district perceived the power base use of their principals and (2) how satisfied these teachers were with this power base use.

Results of analyses are presented in tabular and narrative form. All relationships--whether or not statistically significant--are reported in the data. Data are reported on the basis of elementary, secondary, and elementary and secondary schools combined. Individual school data are reported in appendix C.

Teacher Perceptions of Principal Power Base Use

Actual and ideal power base rankings for principals were determined by tabulating points allocated among the seven power bases presented in the Power Perception Profile-Perception of Other. These actual and ideal power base rankings provide a profile of principals in the district as perceived by their teachers. Rankings are presented for all elementary, secondary, and elementary and secondary principals combined.

Actual and Ideal Ranking of Principal Power Base Use

Table 1 presents data relating to general research question 1: How do teachers perceive the power base use of their principals? Table 1 presents the actual and ideal power base rankings for principals reported by elementary, secondary, and elementary and secondary teachers combined. Elementary teachers perceived their principals as most often using expert, legitimate, and referent power bases to influence teachers and as least often using connection and coercive power bases. Secondary teachers perceived their principals as most often using legitimate, expert, and reward power bases and as least often using coercive and connection power bases. All teachers combined perceived their principals as most often using expert, legitimate, and referent power bases and as least often using coercive and connection power bases.

On a scale of 0-18 the mean rankings for actual power base use by principals for elementary teachers ranged from 11.22 (expert) to 6.82 (coercive); for secondary teachers, they ranged from 10.76 (legitimate) to 7.09 (connection); and for all teachers combined, they ranged from 10.79 (expert) to 6.98 (connection).

Elementary teachers ranked expert, information, and referent power bases as being the power base use they most desired from their principals and connection and coercive power bases as least desired. Secondary teachers ranked expert, referent, and legitimate power bases as most desired and coercive and connection power bases as least desired. All teachers combined ranked expert, referent, and informa-

TABLE 1

ACTUAL AND IDEAL RANKING OF PRINCIPAL POWER BASE USE

	Actual		Ideal	
	Power Base	Means*	Power Base	Means*
Elementary teachers (N=215)	Expert	11.22	Expert	13.88
	Legitimate	10.50	Information	10.33
	Referent	9.65	Referent	10.29
	Information	8.97	Legitimate	9.60
	Reward	8.95	Reward	9.38
	Connection	6.89	Connection	4.95
	Coercive	6.82	Coercive	4.57
Secondary teachers (N=164)	Legitimate	10.76	Expert	13.73
	Expert	10.23	Referent	10.33
	Reward	9.45	Legitimate	9.88
	Referent	8.92	Information	9.60
	Information	8.46	Reward	9.02
	Coercive	8.09	Coercive	5.42
	Connection	7.09	Connection	5.01
Elementary and secondary teachers combined (N=379)	Expert	10.79	Expert	13.82
	Legitimate	10.61	Referent	10.31
	Referent	9.34	Information	10.02
	Reward	9.17	Legitimate	9.72
	Information	8.75	Reward	9.23
	Coercive	7.37	Connection	4.98
	Connection	6.98	Coercive	4.94

*Means based on scale of 0-18.

tion power bases as being most desired and connection and coercive power bases as being least desired.

On a scale of 0-18, the mean rankings for ideal power base use by principals for elementary teachers ranged from 13.88 (expert) to 4.57 (coercive). For secondary teachers they ranged from 13.73 (expert) to 5.01 (connection). For all teachers combined they ranged from 13.82 (expert) to 4.94 (coercive).

Analysis of Actual and Ideal Power Base Means

Table 2 also presents data relating to general research question 1: How do teachers perceive the power base use of their principals? Table 2 presents a comparative analysis of the actual and ideal power base rankings of principals reported by elementary, secondary, and elementary and secondary teachers combined. Actual and ideal power base rankings of principals by teachers were compared statistically by means of a t-test for paired samples. The level of significance was set by the researcher at .05. The means for each group are presented along with the degrees of freedom, the t values, and the significance of the t values.

Differences between actual and ideal power base means reported by elementary teachers were statistically significant for all of the power bases. Differences were significant at the .05 level for reward power, at the .01 level for referent power, and at the .001 level for the remaining five power bases. Elementary teachers preferred that their principals use significantly more reward, referent, information,

TABLE 2

t-TESTS FOR PAIRED SAMPLES OF MEAN DIFFERENCES OF ACTUAL/IDEAL PRINCIPAL POWER BASE USE

		Means				
	Power Base	Actual	Ideal	df	t	p
Elementary teachers (N=215)	Coercive	6.82	4.57	214	9.17	.000***
	Connection	6.89	4.95	214	8.93	.000***
	Expert	11.22	13.88	214	-10.48	.000***
	Information	8.97	10.33	214	-6.72	.000***
	Legitimate	10.50	9.60	214	4.44	.000***
	Referent	9.65	10.29	214	-2.70	.008**
	Reward	8.95	9.38	214	-2.02	.045*
Secondary teachers (N=164)	Coercive	8.09	5.42	163	8.62	.000***
	Connection	7.09	5.01	163	9.59	.000***
	Expert	10.23	13.73	163	-12.74	.000***
	Information	8.46	9.60	163	-4.63	.000***
	Legitimate	10.76	9.88	163	3.68	.000***
	Referent	8.92	10.33	163	-4.88	.000***
	Reward	9.45	9.02	163	2.11	.037*
Elementary and secondary teachers combined (N=379)	Coercive	7.37	4.94	378	12.58	.000***
	Connection	6.98	4.98	378	12.93	.000***
	Expert	10.79	13.82	378	-16.10	.000***
	Information	8.75	10.02	378	-8.08	.000***
	Legitimate	10.61	9.72	378	5.77	.000***
	Referent	9.34	10.31	378	-5.27	.000***
	Reward	9.17	9.23	378	-0.39	.700

* Significant at .05 level
** Significant at .01 level
*** Significant at .001 level

and expert power and significantly less legitimate, connection, and coercive power.

Differences between actual and ideal power base means reported by secondary teachers also were statistically significant for all of the power bases. Differences were significant at the .05 level for reward power and at the .001 level for the remaining six power bases. Secondary teachers preferred that their principals use significantly more information, referent, and expert power and significantly less reward, legitimate, connection, and coercive power.

Differences between actual and ideal power base means reported by elementary and secondary teachers combined were statistically significant for all of the power bases except reward power. All differences were significant at the .001 level. Elementary and secondary teachers combined preferred that their principals use significantly more referent, information, and expert power and significantly less legitimate, connection, and coercive power.

Teacher Satisfaction with Perceived Power Base Use of Principals

Both general and specific measures of satisfaction with principal power base use are included in this section. Tables 3, 4, and 5 report data relating to general research question 2: How satisfied are teachers with the perceived power base use of their principals? Tables 6 through 15 report data relating to the 10 specific questions related to teacher satisfaction with the perceived power base use of their principals.

Teacher Satisfaction with Principal Power Base Use by School

Table 3 presents the d-score means calculated as the difference between actual and ideal scores reported by the teachers. For elementary schools, teacher d-scores ranged from 22.70 to 44.00. For secondary schools, teacher d-scores ranged from 23.39 to 37.73. For elementary and secondary schools combined, teacher d-scores ranged from 22.70 to 44.00. The possible range of d-scores was 0 (high satisfaction) to 126 (low satisfaction). All but one school, an elementary school, fell into the lower end of the satisfaction scale--the end of the scale that suggests relative satisfaction with principal power base use.

The mean d-score was 29.23 for elementary teachers, 30.10 for secondary teachers, and 29.61 for elementary and secondary teachers combined. At the elementary level, 75% of the teacher d-scores fell below and 25% fell above the mean for the district. At the secondary level, 60% of the teacher d-scores fell below and 40% fell above the mean for the district.

Frequency Distribution of Teacher Satisfaction Scores

Table 4 presents the frequency distribution of teacher d-scores as another measure of general teacher satisfaction. Of a possible range of 0-126, d-scores ranged from 0-98. Within this range, 39.8% of teacher d-scores fell between 0 and 24, indicating high satisfaction with principal power base usage and 49.95% of teacher d-scores fell between 25 and 48, indicating moderate satisfaction with principal power base usage. Almost 90% of the teacher d-scores fell

TABLE 3

SATISFACTION (MEAN d-SCORES) OF TEACHERS BY SCHOOL

	N	d-Score
Elementary schools		
E10	20	22.70*
E2	21	25.24
E6	15	25.73
E7	30	26.10
E1	16	27.75
E8	9	27.78
E9	30	27.80
E3	6	28.00
E5	13	29.31
E11	10	29.80
E4	16	30.06
E12	29	44.00
Total	215	29.23
Secondary schools		
S1	31	23.39
S2	45	25.16
S3	32	32.97
S4	23	33.91
S5	33	37.73
Total	164	30.10
Elementary and secondary schools combined	379	29.61

* Possible d-Score range = 0 (high satisfaction) to 126 (low satisfaction)

TABLE 4

FREQUENCY DISTRIBUTION OF TEACHER SATISFACTION SCORES (d-SCORES)

d-Score Range	N	Percentage
0-24	151	39.8
25-48	189	49.9
49-72	33	8.7
73-98	6	1.6
Total	379	100.0

within the lower half of the range, indicating moderate to high satisfaction with principal power base usage. More than 50% of the teachers reported a mean d-score at or below the mean d-score of 29.61, suggesting that more than 50% are at a moderate or high level of satisfaction.

Teacher Satisfaction with Each Power Base Use

Table 5 presents data relating to the relationship between teacher satisfaction and principal power base use. Pearson product moment correlations were computed for the relationships between satisfaction scores (d-scores) and power base rankings. Pearson's r and the probability for r for each group are listed in the table.

Seven significant correlations were identified for elementary teachers, six for secondary teachers, and six for elementary and secondary teachers combined. Significant positive correlations were found between elementary teachers' satisfaction and principal use of coercive, connection, legitimate, and reward power bases. Significant negative correlations were found between elementary teachers' satisfaction and principal use of expert, information, and referent power bases. Because low scores represent high satisfaction and high scores represent low satisfaction, the negative correlations indicate that the more elementary principals used expert, information, or referent power, the more satisfied elementary teachers were with these power base uses. The positive correlations indicate that the more elementary principals used coercive, connection, legitimate, or reward power, the less satisfied elementary teachers were with these power base uses.

TABLE 5

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS OF RELATIONSHIP BETWEEN TEACHER SATISFACTION AND PRINCIPAL POWER BASE USE

	Elementary Teachers d-Score (N=215)		Secondary Teachers d-Score (N=164)		Elementary and Secondary Teachers Combined d-Score (N=379)	
	r	p	r	p	r	p
Coercive	.418	.000***	.441	.000***	.425	.000***
Connection	.431	.000***	.386	.000***	.412	.000***
Expert	-.585	.000***	-.583	.000***	-.581	.000***
Information	-.131	.028*	-.005	.475	-.083	.054
Legitimate	.228	.000***	.192	.007**	.213	.000***
Referent	-.402	.000***	-.434	.000***	-.416	.000***
Reward	.119	.040*	.184	.009**	.147	.002**

* Significant at .05 level
** Significant at .01 level
*** Significant at .001 level

Significant positive correlations were found between secondary teachers' satisfaction and principal use of coercive, connection, legitimate, and reward power. Significant negative correlations were found between secondary teachers' satisfaction and principal use of expert and referent power. The negative correlations indicate that the more secondary principals used expert or referent power, the more satisfied their secondary teachers were with these power base uses. The positive correlations indicate that the more secondary principals used coercive, connection, legitimate, or reward power, the less satisfied secondary teachers were with these power base uses.

Significant positive correlations were found between the satisfaction of elementary and secondary teachers combined and principal use of coercive, connection, legitimate, and reward power. Significant negative correlations were found between the teachers' satisfaction and principal use of expert and referent power. The negative correlations indicate that the more principals used expert and referent power, the more satisfied their teachers were with these power base uses. The positive correlations indicate that the more principals used coercive, connection, legitimate, or reward power, the less satisfied their teachers were with these power base uses.

Teacher Gender and Satisfaction with Power Base Use

Table 6 presents data relating to research question 2a: Is there a relationship between teacher gender and teacher satisfaction with perceived power base use of principals? Differences between male and female teachers' satisfaction with the power base use of their

TABLE 6

t-TEST COMPARISON OF MEAN SCORES OF TEACHER GENDER AND SATISFACTION WITH PRINCIPAL POWER BASE USE

	Means				
	Male	Female	df	t	p
Elementary teachers	23.35 (N=40)	30.58 (N=175)	213	-2.65	.009**
Secondary teachers	29.93 (N=95)	30.35 (N=69)	161	-0.18	.860
Elementary and secondary teachers combined	27.98 (N=135)	30.51 (N=244)	377	-1.51	.132

** Significant at .01 level

principals were compared through the use of tests. The mean satisfaction score, the degrees of freedom, the t-value, and the probability of the t for each group are listed. Only the difference between male and female elementary teachers was statistically significant. The difference was statistically significant at the .01 level, indicating that male elementary teachers were significantly more satisfied than female elementary teachers with the power base use of their principals. Because only one significant difference was identified, research question 2a could be only partially affirmed.

Teacher Marital Status and Satisfaction with Principal Power Base Use

Table 7 presents data relating to research question 2b: Is there a relationship between teacher marital status and teacher satisfaction with perceived power base use of principals? An analysis of variance was computed to compare the means for each group. The mean, the degrees of freedom, the F-ratio, and the probability of F for each group are reported. No significant differences were identified among single, married, or divorced/widowed teachers' satisfaction with the power base use of their principals. Because no significant differences were found, research question 2b could not be affirmed.

Teacher Age and Satisfaction with Principal Power Base Use

Table 8 presents data relating to research question 2c: Is there a relationship between teacher age and teacher satisfaction with perceived power base use of principals? Three Pearson product moment correlation coefficients were computed for the age and satisfaction

TABLE 7

ANALYSIS OF VARIANCE OF RELATIONSHIPS BETWEEN TEACHER MARITAL STATUS AND SATISFACTION WITH PRINCIPAL POWER BASE USE

	Means					
	Single	Married	Divorced/ Widowed	df	F	p
Elementary teachers	28.10 (N=20)	29.40 (N=178)	28.25 (N=16)	2,211	.091	.913
Secondary teachers	29.74 (N=23)	30.49 (N=136)	21.20 (N=5)	2,161	.860	.425
Elementary and secondary teachers combined	28.98 (N=43)	29.87 (N=314)	26.57 (N=21)	2,375	.470	.625

TABLE 8

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS OF THE RELATIONSHIP BETWEEN TEACHER AGE AND SATISFACTION WITH PRINCIPAL POWER BASE USE

	N	r	p
Elementary teachers	203	-.04	.282
Secondary teachers	156	-.077	.171
Elementary and secondary teachers combined	359	-.050	.170

variable. Pearson's r and the probability of r for each group are listed in the table.

No correlations were found to be significant. Because no significant relationships were found, research question 2c could not be affirmed.

Teacher School Level and Satisfaction with Principal Power Base Use

Table 9 presents data relating to research question 2d: Is there a relationship between school level and teacher satisfaction with perceived power base use of principals? A t-test was computed to compare the difference between elementary and secondary teachers' satisfaction with the power base use of principals. The mean satisfaction score, the degrees of freedom, the t-value, and the probability of t for each group are listed. No significant difference was identified between elementary and secondary teachers. Because no significant difference was found, research question 2d could not be affirmed.

Teacher Experience and Satisfaction with Principal Power Base Usage

Table 10 presents data relating to research question 2e: Is there a relationship between total years of teaching experience and teacher satisfaction with perceived power base use of principals? Three Pearson product moment correlation coefficients were computed for the teaching experience and satisfaction variables. Pearson's r and the probability of r for each group are listed in the table.

No correlations were found to be significant. Because no significant relationships were found, research question 2e could not be affirmed.

TABLE 9

t-TEST COMPARISON OF MEAN SCORES OF TEACHER SATISFACTION BY SCHOOL LEVEL WITH PRINCIPAL POWER BASE USE

Means				
Elementary Teachers (N=215)	Secondary Teachers (N=164)	df	t	p
29.23	30.10	377	-0.53	.593

TABLE 10

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS OF THE RELATIONSHIP BETWEEN TEACHER EXPERIENCE AND SATISFACTION WITH PRINCIPAL POWER BASE USE

	N	r	p
Elementary teachers	210	-.090	.097
Secondary teachers	162	-.057	.236
Elementary and secondary teachers combined	372	-.069	.093

Teacher Experience under Current Principal and Satisfaction with Principal Power Base Use

Table 11 presents data relating to research question 2f: Is there a relationship between years of teaching experience under the current principal and teacher satisfaction with perceived power base use of principals? Three Pearson product moment correlation coefficients were computed for the teaching experience under current principal and satisfaction variables. Pearson's r and the probability of r for each group are listed in the table.

One significant correlation was identified at the .05 level. A significant positive correlation was found between secondary teachers' years of teaching experience under the current principal and satisfaction with the power base use of the principal (r=.171). Because low scores represent high satisfaction and high scores represent low satisfaction, the positive correlation indicates that as years of teaching experience under the current principal increased for secondary teachers, satisfaction with the power base use tended to decrease--although when total years of teaching experience and teacher satisfaction with the perceived power base use of principals were examined, no significant correlations were found. Because only one significant relationship was identified, research question 2f could be only partially affirmed.

TABLE 11

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS OF THE RELATIONSHIP BETWEEN TEACHER EXPERIENCE UNDER CURRENT PRINCIPAL AND SATISFACTION WITH PRINCIPAL POWER BASE USE

	N	r	p
Elementary teachers	214	-.083	.114
Secondary teachers	161	.171	.015*
Elementary and secondary teachers combined	375	.051	.164

*Significant at .05 level

Principal Was/Was Not in Current Position When Teacher Assumed Current Position and Satisfaction with Principal Power Base Use

Table 12 presents data relating to research question 2g: Is there a relationship between teachers whose principals were already in their current positions when they assumed their current positions and teacher satisfaction with perceived power base use of principals? Differences between teachers whose principals were or were not in their present positions when the teachers assumed their present positions and the teachers' satisfaction with the power base use of principals were compared using t-tests. The mean satisfaction score, the degrees of freedom, the t-value, and the probability of t for each group are listed. No significant differences were identified between the teacher groups. Because no significant differences were found, research question 2g could not be affirmed.

Teacher Perception of Principal Differential Use of Influence on Basis of Teacher Gender, Age, and Teaching Experience and Satisfaction with Principal Power Base Use

Table 13 presents data relating to research question 2h: Is there a relationship between the degree to which teachers think their principals attempt to use influence differently on the basis of teacher gender, age, and teaching experience and teacher satisfaction with power base use of principals?

Nine Pearson product moment correlation coefficients were computed for the gender, age, teaching experience, and satisfaction

TABLE 12

t-TEST COMPARISON OF MEAN SCORES OF TEACHERS WHOSE PRINCIPALS WERE IN THEIR CURRENT POSITIONS WHEN TEACHERS ASSUMED THEIR CURRENT POSITIONS AND SATISFACTION WITH PRINCIPAL POWER BASE USE

	Means				
	Principal Was in Current Position	Principal Was Not in Current Position	df	t	p
Elementary teachers	29.61 (N=158)	28.18 (N=57)	213	0.59	.556
Secondary teachers	30.41 (N=78)	29.83 (N=86)	162	0.24	.812
Elementary and secondary combined	29.88 (N=236)	29.17 (N=143)	377	0.43	.670

TABLE 13

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS OF THE RELATIONSHIP BETWEEN TEACHER PERCEPTION OF PRINCIPAL DIFFERENTIAL USE OF INFLUENCE ON THE BASIS OF TEACHER GENDER, AGE, AND TEACHING EXPERIENCE AND SATISFACTION WITH PRINCIPAL POWER BASE USE

	N	r	p
Gender			
Elementary teachers	212	.284	.000***
Secondary teachers	156	.275	.000***
Elementary and secondary teachers combined	368	.281	.000***
Age			
Elementary teachers	212	.257	.000***
Secondary teachers	156	.281	.000***
Elementary and secondary teachers combined	368	.267	.000***
Teaching Experience			
Elementary teachers	206	.141	.022*
Secondary teachers	154	.186	.011*
Elementary and secondary teachers combined	360	.158	.001***

*Significant at .05 level
***Significant at .001 level

variables. Nine significant correlations were identified. Pearson's r and the probability of r of each group are listed in the table.

Gender. Significant positive correlations were found between teacher perceptions of principal differential use of influence based on teacher gender and satisfaction with power base use of principals (elementary, r=.284; secondary, r=.275; combined elementary and secondary, r=.281). The positive correlations indicate that as principals used teacher gender as a basis for their influence attempts, elementary teachers tended to be less satisfied with the power base use of principals.

Age. Significant positive correlations were found between teacher perceptions of principal differential use of influence based on teacher age and teacher satisfaction with power base use of principals (elementary, r=.257; secondary, r=.281; combined elementary and secondary, r=.267). The positive correlations indicate that as principals used teacher age as a basis for their influence attempts, teachers tended to be less satisfied with the power base use of principals.

Teaching Experience. Significant positive correlations were found between teacher perceptions of principal differential use of influence based on teacher teaching experience and teacher satisfaction with power bases use of principals (elementary, r=.141; secondary, r=.186; elementary and secondary combined, r=.158). The positive correlations indicate that as principals used teacher teaching experience as a basis for their influence attempts, teachers tended to be less satisfied with the power base use of principals.

Because all the correlations were found to be significant, research question 2h was affirmed.

Teacher Influence on School Operations and Satisfaction with Principal Power Base Use

Table 14 presents data relating to research question 2i: Is there a relationship between perceived teacher influence on school operations and teacher satisfaction with perceived power base use of principals? Three Pearson product moment correlation coefficients were computed for the influence and satisfaction variables. Pearson's r and the probability of r for each group are listed in the table.

Three significant correlations were identified. Significant negative correlations were found between teachers' perceived influence and perceived satisfaction with power base use of principals (elementary, r=-.370; secondary, r=-.361; elementary and secondary combined, r=-.367). The negative correlations indicate that the more influence teachers felt they had over how a school was run, the more satisfied they tended to be with the power base use of principals. Because all relationships were significant, research question 2i was affirmed.

Teacher Satisfaction with Communication with Principal and Satisfaction with Principal Power Base Use

Table 15 presents data relating to research question 2j: Is there a relationship between teacher satisfaction with communication with the principal and teacher satisfaction with perceived power base use of principals? Three Pearson product moment correlation coefficients were computed for the communication and satisfaction variables.

TABLE 14

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS OF THE RELATIONSHIP BETWEEN TEACHER INFLUENCE ON SCHOOL OPERATIONS AND SATISFACTION WITH PRINCIPAL POWER BASE USE

	N	r	p
Elementary teachers	213	-.370	.000***
Secondary teachers	157	-.361	.000***
Elementary and secondary teachers combined	370	-.367	.000***

***Significant at .001 level

TABLE 15

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS OF THE RELATIONSHIP BETWEEN TEACHER SATISFACTION WITH COMMUNICATION WITH PRINCIPAL AND SATISFACTION WITH PRINCIPAL POWER BASE USE

	N	r	p
Elementary teachers	212	-.414	.000***
Secondary teachers	158	-.461	.000***
Elementary and secondary teachers combined	370	-.433	.000***

***Significant at .001 level

Pearson's r and the probability of r for each group are listed in the table.

Three significant correlations were identified. Significant negative correlations were found between teacher satisfaction with communication with their principals and satisfaction with the power base uses of principals (elementary, r=-.414; secondary, r=-.461; elementary and secondary combined, r=-.433). The negative correlations indicate that the more satisfied teachers were with their communication with the principal, the more satisfied they tended to be with the power base use of their principals. Because all relationships were significant, research question 2j was affirmed.

The following chapter will examine the findings of this study in relation to those in the literature pertaining to elementary and secondary schools. Implications of this study as well as suggestions for further study will be discussed.

CHAPTER V

DISCUSSION/CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to determine (1) how elementary and secondary school teachers in a large North Dakota school district perceived the power base use of their principal and (2) how satisfied these teachers were with the power base use.

Teacher perceptions of principal power base use were measured by comparing actual with ideal responses to the Power Perception Profile-Perception of Other developed by Hersey and Natemeyer in 1979. Actual and ideal differences (d-scores) were used as an index of teacher satisfaction because it was determined that they would provide a more discrete measure of satisfaction with principal power base use than would a general question about satisfaction. The d-scores also were intended to lessen the impact of principal personality and a teacher's general satisfaction/dissatisfaction with work.

Teacher satisfaction with principal power base use was analyzed on the basis of selected background variables. Follow-up interviews with principals were conducted to obtain reactions to teacher perceptions and to gather other supplementary data related to perceived power uses and to the instrument.

Two general research questions were developed to examine (1) how elementary and secondary school teachers in a large North Dakota school district perceived the power base use of their principals and

(2) how satisfied these teachers were with this perceived power base use of their principals. Ten more specific questions were developed to examine the influence of background variables on teacher satisfaction. The remainder of this chapter presents discussion/conclusions related to the results of this study and recommendations for action and research.

Discussion/Conclusions

The rankings of the power bases most used by principals generally were in accord with the findings from earlier studies in business, industry, and higher education as well as from studies of K-12 educational settings. Expert, legitimate, and referent power bases were perceived as most used by principals and connection and coercive power bases as least used. Although most of the earlier studies employed the five-power-base French and Raven (1959) typology instead of the seven-power-base Hersey, Blanchard, and Natemeyer (1979) typology, most and least used power bases were quite similar. Use of the seven-power-base model, while not significantly modifying general perceptions, has added detail that provides an expanded interpretation of principal power use.

Responses to the individual power bases also were similar to previous research findings. Teacher satisfaction was associated positively with principal use of expert and referent power bases and associated negatively with coercive, connection, legitimate, and reward power bases.

Overall measures of teacher satisfaction--the range of teacher d-scores by school and the frequency distribution of teacher d-scores--

reflected general satisfaction with principal power base use. Of the 10 background variables only three resulted in consistently significant findings on all levels: teacher perception of principal differential use of influence on the basis of teacher gender, age, and teaching experience; teacher influence on school operations; and teacher satisfaction with communication with the principal. Two variables resulted in significant findings at one level only: teacher gender at the elementary level and years of teaching experience under their current principal at the secondary level. Five variables resulted in nonsignificant findings: marital status, age, school level, teaching experience, and whether or not the principal was in his current position when teachers assumed their current positions.

Perceptions of Principal Power Base Use

The researcher sought to determine how teachers perceived the power base use of their principals. The finding that expert, legitimate, and referent power bases are used most often by principals corroborates the findings of most earlier studies. This suggests that power base use has remained relatively constant and may reflect a relatively fixed nature of administrative power base use. These three power bases reflect a combination of personal and positional power that is inherent in most administrative roles. The fact that a principal is the legal head of the school inevitably affects all responses to his/her power uses. Even those power bases typically considered personal--expert, referent, and information (Hersey and Blanchard 1982)--are inescapably colored by the power of the office. For example, one may more readily respond to legitimate authority if the

principal is likeable. Power bases may operate alone but more likely are intertwined. French and Raven (1959) discussed their power bases in terms of the interrelationships between the different types of power.

> It is rare that we can say with certainty that a given empirical case of power is limited to one source. Normally the relation between O and P will be characterized by several qualitatively different variables which are bases of power (p. 612).

Hersey, Blanchard, and Natemeyer (1979) noted that "these power bases constitute an interaction-influence system. Each power base affects each of the other power bases" (p. 425).

Three of the four power bases used most often by elementary principals--expert, referent, and information--represented personal power bases while only two of the four power bases used most often by secondary principals--expert and referent--represented personal power bases. This would appear to fit with the perception that secondary school principals tend to have less collegial relationships with their faculties than do elementary principals.

Overall, teachers ideally preferred that principals rely on personal power bases as reflected in the first-second-third rankings of expert, referent, and information power bases, respectively. Overall, teachers preferred greater use of expert, referent, information, and reward (though only slightly) power bases than they actually perceived in the behavior of their principal, again expressing a preference for personal over positional power. Legitimate, connection, and coercive power bases were less desired. This division between the types of power bases more and less desired reflects a clear preference for

personal over positional power base use, with legitimate power being the most preferred of the positional power bases. This could be due to the fact that legitimate authority use seems less capricious than the others. Overall, the biggest change in ranking was in the de-emphasis of legitimate power (second to fourth) and in the emphasis of information power (fifth to third). At the secondary level the biggest change in ranking was in the de-emphasis of reward power and in the emphasis on referent power.

The preference for more expert and referent power base use matches earlier research and would appear to be an obvious ideal. The fact that principals are viewed as most often using expert power supports the idea that principals are viewed as knowledgeable and, therefore, powerful and deserving of their leadership role. It also suggests that principals are, or are attempting to be, the instructional leaders the literature says they should be. While Hoover (1980) and Stimson and Appelbaum (1988) reported teachers ranking principal use of information power fourth and third, respectively, there is no research to show its preferred use. The desire for increased principal use of information power may reflect the isolation of teachers and their consequent desire to have greater input into and to know the rationale for decisions. The desire for the use of more information power is more pronounced at the elementary than secondary level; this suggests that despite the principals' reliance on personal power bases and the assumption that elementary environments may tend to be more collegial, teachers feel left out. At the secondary level the fourth place actual and the second place ideal ranking of referent power versus the fifth

place actual and the fourth place ideal ranking of information power suggests that improved relationships are more important than access to information.

Reward power seems to send a mixed message--more desired at the elementary level, less desired at the secondary, and slightly more desired overall, probably due to larger numbers of elementary teachers. This difference in value suggests that the two groups interpret reward power differently since principals at either level typically have few rewards to offer (Lieberman 1988). One may hypothesize that at the secondary level rewards are seen as divisive.

The rankings of coercive and connection power as the least used and least desired power bases suggest that while teachers do not appear overly concerned by the uses of these bases, either they occur often enough to be less desired or, more likely, their connotations create disapproval. While the low ideal ranking of coercive power could be expected from professionals, the low ideal ranking of connection power seems less obvious.

While teachers appeared to view connection power as a threat, as they did in the Stimson and Appelbaum (1988) study, principals (according to the interview data) commonly viewed it as a positive strategy for getting resources for the school. It appears that teachers resent principals using or having political muscle to get what they want. This finding was surprising as one might assume that teachers would value a principal's connections for benefits their school might receive.

Secondary teachers reported greater use of legitimate, reward, and coercive power bases by their principals than did elementary teachers, suggesting a more authoritarian principal style at the secondary level. Secondary teachers desired a decrease in the use of legitimate and reward power bases and an increase in the use of referent and information power bases. Elementary teachers desired decreased use of only one power base (legitimate) and increased use of only one power base (information). This finding suggests that there may be greater principal reliance on positional power at the secondary than at the elementary level. Secondary teachers may tend to be more militant because of their more predominantly male populations and involvement in union activities (Cresswell, Murphy, and Kerchner 1980).

Overall, the desire for more principal use of expert, referent, and information power coupled with a desired decrease in legitimate power suggests a response that may go beyond a principal to the structure at large. There appears to be a desire for a more personalized relationship, greater expertise, and more information on which to base one's own decisions. Legitimate power appears to be in a state of limbo, reflecting its current ambivalent and, perhaps, transitional state.

The overall respective high and low rankings of expert and coercive power, both actually and ideally, suggest that principals are using the power bases effectively and in harmony with the desires of teachers. Even though these rankings lack the validity of absolute scales, the extremes can be used to draw conclusions more easily than the power bases in the middle rankings.

Actual/Ideal Comparisons

The significant differences between all of the actual and ideal comparisons with all groups, except for reward power in the combined group, reflect the inevitable discrepancy that will occur when interpretations of power bases are different, when groups interpreting them are different, and when power relationships are unequal as they are between teacher and principal.

Expertise has a positive connotation in almost any situation. The desire for the use of significantly more expert power by the principal may reflect teachers' needs for someone to mediate the never-ending and varied problems in schools and the constant infusion of new programs, mandates, and ideas. The isolation of many teachers from current happenings and the constraints on their time to keep current also may motivate the teachers to want their principals to be more expert.

Since schools deal almost exclusively in human resources, it is natural that referent power be valued highly. Since there are so few tangible rewards available for use by principals, personal relationships, support, compliments, and other non-tangibles may assume greater importance for teachers.

All organizations suffer from the complaint that there is insufficient communication. The isolation of the teacher, the limited ability of teachers to participate in professional development, and the emphasis on participatory decision making all create a desire for increased information.

Overall, an increase in principal reward power was slightly more desired but the difference was insignificant. Differences were significant, however, at the elementary and secondary levels. Elementary teachers perceived the principal as having little reward power but wished he used more; secondary teachers perceived the principal as having and using reward power but wished he used less. Rewards may be seen at the elementary level as something to improve performance, while at the secondary level they may be seen as divisive. Tangible rewards--especially monetary ones--are difficult for principals to dispense because contracts set salaries and budgets usually do not permit large discretionary funds. However, principals may have small discretionary funds, may grant favors, may interpret the contract strictly or loosely, may operate a closed or open climate, and may assign duties; all of these could be interpreted as rewards.

Legitimate power was recognized as first or second in use but was not valued highly by any of the three groups even though secondary teachers ideally ranked it third. Its lower ideal ranking may reflect an association with coercion (since a principal legally may require compliance), a desire for less hierarchy (especially in light of the teacher empowerment movement), or a rejection of school authority as presently structured and used. The rankings suggest a desire for the principal to use expertise and personal skills to earn compliance from teachers rather than demanding it. The teacher empowerment movement with its emphasis on participative decision making may have encroached on the idea of legitimate authority.

Connection power appears to be disliked because it suggests special privilege. Interview data revealed great principal satisfaction with connection power because of the benefits it could confer upon the school. Since connections imply a relationship with superiors or others outside of rather than inside the school, it appears that teachers interpreted this power base negatively. It would appear that the base connotes a violation of egalitarian principles that teachers may favor as a norm in schools. It appears that teachers fear consequences rather than potential benefits from a principal's connections.

The dislike of coercive power is identical to the findings in previous studies. The idea of forcing someone to do what is required generates personal as well as professional resistance.

Variables Related to Satisfaction with Principal Power Base Use

The fact that all d-scores fell into the lower half of the range suggests that most teachers generally appeared satisfied with principal power base use. The mean score falling into the lower one-third of the range also suggests relative satisfaction. Although there were fewer secondary than elementary schools, elementary and secondary d-score ranges and their mean scores were similar, showing no great differences. The teachers registering the least satisfaction were in an elementary school whose principal disagreed with his profile. The frequency distribution of d-scores showed more than 89% of teacher d-scores appearing in the lower half of the range and almost 40% in the lower one-fourth. This suggests that teachers generally are satisfied with the principal power base use which they have experienced.

As was true in many of the earlier studies, all teachers tended to be more satisfied the more that expert and referent power bases were used; at the elementary level, this also was true of information power. Teachers tended to be less satisfied when coercive, connection, legitimate, and reward power bases were used. These results roughly parallel those found in the power base rankings and in the actual and ideal differences. Legitimate, reward, coercive, and connection power bases were ranked lower and desired less. The negativity toward these four power bases suggests avoiding their use; however, caution should be taken because there appears to be a built-in bias towards some of these power bases. There is, for example, natural resistance to authority, but that does not diminish the importance of that authority. Likewise, although current rhetoric espouses shared authority, research in regard to teacher participation suggests a selective desire to participate (Alutto and Belasco 1972, Conway 1976).

Male teachers were significantly more satisfied than female teachers with the power base use of their principals. This may be due to the small number of males (only one-fourth the number of females) and the fact that they are the same gender as the principals. This is somewhat corroborated by the findings that teachers perceived principals as using their power differently on the basis of a teacher's gender. The lack of difference at the secondary level and overall suggests that the difference at the elementary level was due to the disproportionate ratio of males to females.

The lack of difference by school level was somewhat surprising given the different power base rankings and the differences in power

bases desired to be increased and decreased. It was expected that elementary teachers would express greater satisfaction than secondary teachers since their daily working relationships with principals seem closer and classroom experiences have been similar.

The negative relationship between secondary teachers' years of teaching experience under their current principal and their satisfaction with his power base uses suggests that the longer they serve under their principal the less satisfied they are with him. This reflects a similar finding by Cresswell, Murphy, and Kerchner (1980) but is somewhat contrary to a finding by Muth (1973) that the older and more experienced the teacher the less conflict he/she saw. Perhaps this finding can be explained by one secondary principal's interview response that in his long principalship he had managed to "rattle every chain in the building."

All relationships between teacher perception of principal differential use of influence on the basis of gender, age, and teaching experience and teacher satisfaction with principal power base use were negatively associated. These negative associations indicate that the more a principal based his use of influence on the age, gender, and teaching experience of a teacher, the less satisfied teachers were. How principals used their power differently was unclear, but results suggested that male elementary teachers were perceived as being favored over females and that newer teachers were perceived as being treated more favorably than teachers who had been in their positions for longer periods of time. These results suggest that teachers perceive principal bias in the utilization of their power. Interestingly, the

correlations between elementary and secondary levels are quite similar for each category. Although these correlations are significant, they are quite small. Thus while teachers perceived some bias in principal application of power, it did not seem to concern them greatly.

All of the relationships between teacher influence on school operations and satisfaction with principal power base use were positively associated. As teachers perceived their influence on school operations to increase so did their satisfaction with principal power base use. This finding appears to support the theory of power as a variable sum since teachers may credit the principal for involving them and view him/her as an important means for enhanced satisfaction, involvement, and power.

All of the relationships between teacher satisfaction with communication with the principal and satisfaction with principal power base use were positively associated. As teacher satisfaction with communication with the principal increased, so did teacher satisfaction with the principal's power base use. These results suggest that the more communication occurs between principal and teacher, the more tolerant teachers are of principal power base use. These results might counter the negative impact of gender, age, and teaching experience. Communication appears to be a bigger predictor of satisfaction with principal power base use than influence on school operations, suggesting that teachers may want to be kept informed but not necessarily involved. This fits with findings that teachers want to be selectively involved (Alutto and Belasco 1972). This finding also seems to fit

with the findings that teachers desire principals to use more information power than they do and to use it more often than they do.

While these results--especially in regard to power base use and satisfaction with various power bases--follow previous studies, their implications are different. The high emphasis on expert, referent, and information power and the de-emphasis on legitimate power suggests a political agenda as well as personal preference. There is a movement for greater employee participation in the decision making process in many workplaces, there are personal and professional desires to be treated as a partner rather than as a subordinate, and there are reform initiatives for site based management and teacher involvement in decision making. Teachers apparently want principals to function as instructional leaders as evidenced by their desire for the use of expert, referent, and information power bases; however, they want to participate in and restructure the process as evidenced by their desire for less use of legitimate power.

Recommendations

The following recommendations are based on this study and the review of the literature and are suggested for action regarding principal use of his/her power bases.

1. Principals from time to time should ask teachers to report their perceptions of the principal's power use and principals should complete a self-perception instrument. The results could be used as a basis for discussing the principal's management style. This could improve communication, make principals conscious of their influence

styles, and provide a self-correcting mechanism for abuses they or their teachers perceived.

2. Principals should not underestimate the power of their office. Although teachers report that they would like to see less reliance on legitimate power by principals, they do appear to recognize the necessity of its use. This power combined with the expertise and personal relationships that teachers see and desire in the principalship could provide a considerable basis for exerting leadership. Conversely, principals should recognize that "the very possession of power poses a threat to those in its domain" (Cartwright 1965, p. 36). Principals, therefore, need to be aware that anytime they act, however benign they might see their actions to be, there is the possibility that their behaviors may be misperceived. Teachers are aware that all of their interactions with and observations by principals are subject to judgment.

3. Principals must continue to develop their competencies and personal relations skills. Although they have the power of the office, their effectiveness in governing--and especially in implementing change--rests on the consent of staff and students. Principals constantly are engaged in persuading those they supervise to maintain or change the status quo. Because so much in schools occurs in classrooms away from the observation of principals, effective school operation is dependent to a considerable degree upon the cooperation of the teachers. Referent and information power bases also must be developed because the school choice movement will subject the principal as well as the organization to close scrutiny. Schools will be judged

by their leadership. However, development of increased referent power should not mean less vigilant monitoring of teacher performance. Despite the fact that teachers associated reward power negatively with satisfaction, rewards can be potent motivators and should not be disregarded.

4. Principals should work at expanding their zones of acceptance with and from staff. The more trust they can develop, the more likely that their use of the power bases--even those perceived negatively--will be accepted.

5. Principals should be aware that power is based largely upon a "norm of reciprocity" (Murphy 1988, p. 659). The current emphasis on teacher empowerment will require principals to change their perceptions and uses of their own power.

6. Principals should determine which kinds of expertise are most valued and which kinds of coercion can be accepted. They also need to define for themselves which types of power and decision making they should relinquish and which they should retain. Principals must recognize that power sharing is not an all-or-nothing situation but a matter of degree. As Conway (1976) and Alutto and Belasco (1972) found, desired participation in school decisions is curvilinear.

> The desire for increased participation in organizational decision making is not equally and widely distributed throughout the school population. Rather, certain substratum of teachers desire more participation than they currently enjoy (are decisionally deprived), while others desire less participation (are decisionally saturated), while still others desire no change in the current rate of participation (Alutto and Belasco 1972, p. 38).

7. Principals will have to develop a sense of shared power and responsibility in teachers not just to satisfy teacher desires for

empowerment but, more practically, so that principals are not overwhelmed with demands, particularly in smaller schools. Believing that they should be the experts that much of the literature suggests is likely to set principals up for failure. Principals must think about their roles in new ways, a paradoxical "less is more" approach. Murphy (1988) described the paradoxical challenge as "taking charge involves letting go" (p. 659).

8. Teachers' pronounced desire that principals use more information power suggests that principals would do well both to obtain and to use more information as the basis for their decisions and to share more information with teachers. Particularly if teachers are to become more involved in the decision making process, they will need more information about a wide variety of issues than they now have.

9. Principals should exert their power. Sharing power does not mean abrogating it. DeBruyn (1976) pointed out that whenever appointed leaders do not take charge of their responsibilities, leadership will emerge from the group the appointed leader should be directing. Principals should not shy away from exerting power because of the clamor to share it; they just need to apply it judiciously. Research reveals that despite the widespread notion that effective change must come from the bottom up, change can occur if goals are set participatively or by management alone (Conway 1984). Research also reveals that satisfaction is a function of the types of decisions that people are involved in as well as their degree of involvement (Conway 1984).

The following recommendations based on this study are suggested for further research on principal power base use.

1. Research should be conducted to determine the effects of the teacher empowerment movement on principal power and whether or not sharing power supports the variable sum theory of power.

2. Since the seven power bases present a limited view of influence efforts and are not necessarily present or available to all principals at all times for all situations, further research should explore all of the power bases/means available to principals. It should study the interactions of power bases with each other, their effects upon different situations, and their alteration over time. Particular situations might be examined in terms of the means of compliance used without regard to the limitations of a typology. Studies also should be conducted on the types of situations and issues in which principals are more likely to exert power and the type and degree of that power.

3. The actual/ideal research method should be used to study the effects of power use in specific situations.

4. Power base theory should be used to validate Hersey and Blanchard's leadership theory. Maturity levels of teachers should be determined and various decision situations created to see if principals would apply the power bases suggested by the model and if teachers would respond as expected.

5. Teacher power bases should be studied to determine how teachers counter principal influence efforts and use power to achieve their own goals.

6. The interview format should be explored more fully. This researcher gathered some interesting information from principals, but it was not gathered systematically enough to explain any of the results with any degree of reliability. For example, loss of power could have been explored in terms of specific situations--e.g., students' rights--rather than a more global question.

7. Teacher perceptions of principal power bases should be compared to principal self-perceptions of the same bases. Also, satisfaction with individual aspects of the job as well as general satisfaction should be measured.

8. Research should be conducted to determine a predictive model of the type of power a principal is likely to exert to gain compliance and the effectiveness of types of power in different situations and with different people; power could be researched in terms of its effectiveness in improving productivity, morale, turnover, change, and school climate.

9. Power bases should be defined in terms of specific effects they have so that more precise analysis can occur. It is likely, for example, that a given power base would be interpreted differently at different levels of schooling so that results might not be comparable.

This research effort has attempted to re-examine the theory of power base use at a time when teacher-principal influence on the school is a major focus of the school reform/restructuring effort. Although studying power with a power base typology presents a limited view of power, it does provide a useful basic understanding of some of the dynamics operating in power relationships.

APPENDICES

APPENDIX A

RESEARCH INSTRUMENT

Side One

I. **Teacher Background Questionnaire**

1. ____Male ____Female

2. ____Single ____Married ____Divorced ____Widowed

3. ____Age

4. ____Elementary (K-6) ____Secondary (7-12)

5. ____Years of teaching experience (include this year)

6. ____Years of teaching experience under your current principal (include this year)

7. ____Yes ____No Was your principal already in his current position when you assumed your current teaching position?

8. To what degree do you think that your principal attempts to use influence differently on the basis of the teacher's:

(Circle one number for each item.)

a. Sex?	1	2	3	4	5
b. Age?	1	2	3	4	5
c. Teaching experience?	1	2	3	4	5
	(Not at all)				(Great deal)

9. In general, how much say or influence do you feel that you as an individual have on how your school is run? (Circle one)

1 2 3 4 5

(None) (Great deal)

10. How satisfied are you with the communication you have with your principal? (Circle one)

1 2 3 4 5

(Not at all) (Very satisfied)

II. Response Sheet--Actual

Actually, I Respond to This Leader's Influence Attempts Because:

1.	A
	B
2.	C
	D
3.	E
	F
4.	G
	A
5.	B
	C
6.	D
	E
7.	F
	G
8.	A
	C
9.	B
	D
10.	C
	E
11.	D
	A
12.	E
	B
13.	F
	C
14.	G
	B
15.	A
	E
16.	B
	F
17.	C
	G
18.	D
	F
19.	E
	G
20.	F
	A
21.	G
	D

Side Two

III. Response Sheet--Ideal

Ideally, I Would Like to Respond to this Leader's Influence Attempts Because:

1.	A
	B
2.	C
	D
3.	E
	F
4.	G
	A
5.	B
	C
6.	D
	E
7.	F
	G
8.	A
	C
9.	B
	D
10.	C
	E
11.	D
	A
12.	E
	B
13.	F
	C
14.	G
	B
15.	A
	E
16.	B
	F
17.	C
	G
18.	D
	F
19.	E
	G
20.	F
	A
21.	G
	D

APPENDIX B

PRINCIPAL INTERVIEWS

Principal Interviews

All 11 elementary (one principal supervised two schools) and five secondary principals in the district were asked to participate in follow-up interviews at which the researcher shared the results of the Power Perception Profile-Perception of Other with each principal. Each interview was designed primarily to elicit the principal's reaction to his power base use profiles in an attempt to elucidate the data.

The first question asked whether the principal perceived his profile to accurately reflect his self-perception. Principal responses were grouped into three writer-designated categories: (1) seems accurate/matches my perceptions, (2) not sure, and (3) not accurate/ doesn't match my perceptions. Six elementary principals agreed with their profiles, three were relatively noncommittal, and two tended to disagree. Three of the secondary principals agreed with their profiles and two were noncommittal.

The second question asked whether the principal could suggest any reasons for discrepancies between actual and ideal power bases. Responses to individual actual/ideal power base discrepancies varied considerably. Since each profile tended to be different, each principal responded differently. Even when profiles were similar or the same, principal responses to them were not. Some principals responded thoughtfully in great detail; others did not. Therefore, there is no comparable data for all principals across all power bases. Some power

bases tended to generate more reaction than others; for example, responses to expert and coercive power bases provided some illumination as to principals' thinking about their power bases and their teachers' perceptions of them. However, not all principals discussed all areas of difference and often did not discuss them in a way that provided any insight, responding merely with a "yes" or "no" or they were/weren't surprised. Power bases most often discussed were coercive and connection which tended to be ranked lowest and expert power which tended to be ranked highest. These bases very frequency reflected a substantial difference between their actual and ideal uses.

Principals generally were able to provide explanations for teachers' perceptions. They generally were comfortable with the perceptions even if they tended to be negative. They seemed to recognize and accept the fact that they might be viewed in a less than ideal light. Because not all principals responded to each power base but responded primarily to areas of perceived differences between actual and ideal power base uses, general overall conclusions could not be fairly drawn.

The third question asked whether the principal presently considered himself to be more or less powerful in carrying out his functions. Seven elementary principals indicated that they felt they had become more powerful during their tenures as principals, one indicated that he felt his power was about the same, and three indicated that they felt they were less powerful. Two secondary principals indicated that they felt they were more powerful while three indicated that they felt they were less powerful. Increased power often was

credited to experience in the office and the development of relationships with the central office and the community. Most of the principals considered themselves to be quite powerful in their own buildings. Decreased power often was attributed to collective negotiations, red tape, and increased teacher influence in making changes.

The fourth question asked how useful, if at all, the principal considered these profile data to be. Eight elementary principals considered the results to be of use or value to themselves, one was unsure, and two considered the results to be only marginally valuable or not valuable. One secondary principal considered the results to be valuable (though indefinite), one was unsure, and three considered the results not to be valuable. Principals either seemed to be interested in self-examination and in relating better to their staffs or they expressed no desire to change their way of operating.

APPENDIX C

POWER BASE RANK ORDER BY SCHOOL

TABLE 16

POWER BASE RANK ORDER BY SCHOOL

	1st	2nd	3rd	4th	5th	6th	7th	d Score
Power Base								
E1 (N=16)								
A	Exp 11.50	Leg 10.38	Ref 9.50	Inf 8.75	Rew 8.38	Coer 7.88	Conn 6.63	27.75
I	Exp 14.19	Leg 9.88	Inf 9.63	Ref 9.50	Rew 9.44	Coer 5.94	Conn 4.44	
E2 (N=21)								
A	Exp 11.43	Ref 10.57	Leg 9.57	Rew 9.43	Inf 8.62	Coer 6.81	Conn 6.57	25.24
I	Exp 13.29	Ref 11.00	Inf 10.19	Leg 8.90	Rew 8.43	Coer 6.43	Conn 4.76	
E3 (N=6)								
A	Exp 13.17	Ref 11.67	Leg 11.17	Rew 8.00	Inf 7.83	Conn 6.33	Coer 4.83	28.00
I	Exp 14.50	Leg 11.00	Ref 10.50	Inf 9.17	Rew 8.33	Conn 6.67	Coer 2.83	
E4 (N=16)								
A	Leg 10.88	Ref 10.44	Exp 10.00	Rew 9.25	Inf 8.31	Coer 7.88	Conn 6.31	30.06
I	Exp 14.06	Ref 10.88	Inf 10.25	Leg 9.38	Rew 7.94	Conn 5.56	Coer 4.94	
E5 (N=13)								
A	Exp 10.54	Leg 10.54	Ref 10.38	Inf 10.00	Rew 8.08	Conn 7.15	Coer 6.38	29.31
I	Exp 13.92	Inf 11.62	Ref 11.15	Rew 9.69	Leg 9.08	Conn 4.46	Coer 3.08	
E6 (N=15)								
A	Exp 12.87	Ref 11.60	Leg 10.60	Inf 9.47	Rew 8.13	Conn 5.80	Coer 4.53	25.73
I	Exp 13.40	Rew 10.73	Inf 10.53	Leg 10.47	Ref 9.87	Coer 4.87	Conn 3.13	
E7 (N=30)								
A	Exp 12.20	Leg 10.60	Inf 9.77	Ref 9.47	Rew 9.27	Conn 6.10	Coer 5.60	26.10
I	Exp 14.83	Inf 11.07	Leg 9.73	Ref 9.60	Rew 9.33	Conn 5.07	Coer 3.40	
E8 (N=9)								
A	Exp 12.89	Ref 9.89	Inf 9.67	Leg 8.89	Rew 8.89	Conn 7.00	Coer 5.78	27.78
I	Exp 13.33	Ref 10.78	Rew 10.11	Inf 9.67	Leg 8.67	Conn 6.56	Coer 3.89	
E9 (N=30)								
A	Exp 11.03	Ref 9.97	Leg 9.80	Inf 9.13	Rew 8.53	Conn 7.93	Coer 6.60	27.80
I	Exp 12.97	Ref 10.30	Inf 10.23	Leg 9.53	Rew 9.13	Conn 5.97	Coer 4.87	
E10 (N=20)								
A	Exp 12.90	Leg 10.30	Ref 9.95	Rew 9.45	Inf 7.70	Coer 6.70	Conn 6.00	22.70
I	Exp 14.50	Ref 10.80	Leg 10.15	Rew 10.15	Inf 9.00	Coer 4.70	Conn 3.70	
E11 (N=10)								
A	Leg 11.60	Exp 11.20	Rew 9.10	Inf 8.80	Ref 8.50	Coer 7.30	Conn 6.50	29.80
I	Exp 13.50	Inf 11.40	Leg 9.70	Rew 9.70	Ref 9.20	Coer 4.90	Conn 4.60	
E12 (N=29)								
A	Leg 11.72	Rew 9.52	Coer 9.17	Inf 8.93	Conn 8.62	Exp 8.17	Ref 6.86	44.00
I	Exp 13.97	Inf 10.52	Ref 10.28	Rew 9.66	Leg 9.34	Conn 5.17	Coer 4.07	
All Elem. (N=215)								
A	Exp 11.19	Leg 10.62	Ref 9.54	Inf 9.00	Rew 8.99	Conn 6.85	Coer 6.83	29.23
I	Exp 13.92	Inf 10.41	Ref 10.25	Leg 9.57	Rew 9.42	Conn 4.92	Coer 4.51	
S1 (N=31)								
A	Exp 11.35	Leg 10.29	Rew 9.61	Ref 9.39	Inf 8.52	Conn 7.00	Coer 6.81	23.39
I	Exp 12.71	Leg 10.84	Ref 9.65	Rew 9.26	Inf 8.58	Coer 6.48	Conn 5.48	
S2 (N=45)								
A	Exp 11.91	Leg 10.87	Ref 9.82	Rew 8.89	Inf 8.13	Coer 7.58	Conn 5.80	25.16
I	Exp 14.40	Ref 11.22	Leg 9.98	Inf 9.69	Rew 8.27	Coer 4.78	Conn 4.67	
S3 (N=32)								
A	Leg 10.94	Exp 9.41	Rew 9.34	Coer 8.84	Inf 8.19	Conn 8.16	Ref 8.13	32.97
I	Exp 13.56	Inf 10.16	Leg 9.88	Ref 9.59	Rew 8.88	Conn 5.63	Coer 5.34	
S4 (N=23)								
A	Leg 10.87	Exp 9.74	Rew 9.74	Inf 9.04	Coer 8.52	Ref 8.30	Conn 6.78	33.91
I	Exp 14.30	Rew 10.22	Ref 10.13	Inf 9.87	Leg 9.35	Coer 4.65	Conn 4.48	
S5 (N=33)								
A	Leg 10.82	Rew 9.97	Coer 8.94	Inf 8.70	Ref 8.45	Conn 8.09	Exp 8.03	37.73
I	Exp 13.55	Ref 10.61	Inf 9.73	Leg 9.21	Rew 9.15	Coer 5.91	Conn 4.82	
All Sec. (N=164)								
A	Leg 10.61	Exp 10.35	Rew 9.36	Ref 9.11	Inf 8.46	Coer 7.98	Conn 7.12	30.10
I	Exp 13.70	Ref 10.37	Leg 9.88	Inf 9.57	Rew 9.01	Coer 5.43	Conn 5.04	
Elem. & Sec. (N=379)								
A	Exp 10.79	Leg 10.61	Ref 9.34	Rew 9.17	Inf 8.75	Coer 7.37	Conn 6.98	29.61
I	Exp 13.82	Ref 10.31	Inf 10.02	Leg 9.72	Rew 9.23	Conn 4.98	Coer 4.94	

A = Actual
I = Ideal
Exp = Expert

Leg = Legitimate
Ref = Referent
Inf = Information

Rew = Reward
Coer = Coercive
Conn = Connection

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